

Catalog of the Hydroptilidae (Insecta, Trichoptera)

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Abstract

The microcaddisfly (Trichoptera: Hydroptilidae) fauna is catalogued from a review of more than 1,300 literature citations through the end of 2020 to include 2,665 currently recognized, valid species in six subfamilies and 76 genera. Fourteen subspecies are included in the total as well as 23 fossil species and three fossil genera. The family Ptilocolepidae (Trichoptera), also covered in this catalogue, comprises 19 valid species in two genera; two subspecies and two fossil species are included in the total. The monotypic genus *Eutonella*, currently considered incertae sedis within Trichoptera, was formerly placed in Hydroptilidae and is also included in this catalogue. Genus-group and species-group synonyms are listed. Information on the type locality, type depository, sex of type, distribution by country, and other relevant taxonomic or biological information is included for each nominal species. Summary information on taxonomy, phylogeny, distribution, immature stages, and biology are provided for each subfamily, tribe, and genus where known. An index to all nominal taxa is provided to facilitate catalog use.

Keywords

Caddisflies, Trichoptera, microcaddisflies, Hydroptilidae, catalog, taxonomy, distribution, valid names, synonyms, bibliography

Table of contents

Introduction.....	4
General morphology and biology	7
Taxonomic history	11
Other checklists, catalogs, and bibliographies	13
Purpose of the catalog	14
Format of the catalog	14
List of type depositories.....	16
Catalog.....	21
Family Hydroptilidae	21
Subfamily Hydroptilinae	22
Genus <i>Acanthotrichia</i>	22
Genus <i>Acritoptila</i>	22
Genus <i>Aenigmatrichia</i>	24
Genus <i>Agraylea</i>	25
Genus <i>Allotrichia</i>	31
Genus <i>Austratrichia</i>	34
Genus <i>Cyclopsiella</i>	34
Genus <i>Dhatrichia</i>	34
Genus <i>Hellyethira</i>	36
Genus <i>Hydroptila</i>	40
Genus <i>Jabitrchia</i>	123
Genus <i>Kholaptila</i>	124
Genus <i>Maeyaptila</i>	124
Genus <i>Microptila</i>	125
Genus <i>Missitrichia</i>	127
Genus <i>Mulgravia</i>	128
Genus <i>Oxyethira</i>	128
Genus <i>Paroxyethira</i>	175
Genus <i>Paucicalcaria</i>	177
Genus <i>Sutheptila</i>	178
Genus <i>Tangatrichia</i>	178
Genus <i>Tricholeiochiton</i>	179
Genus <i>Ugandatrichia</i>	181
Genus <i>Vietrichia</i>	184
Genus <i>Wlitrichia</i>	185
Genus <i>Xuthotrichia</i>	185
Subfamily Leucotrichiinae.....	186
Tribe Alisotrichiini	186
Genus <i>Alisotrichia</i>	187
Genus <i>Byrsopteryx</i>	193
Genus <i>Celaenotrichia</i>	195

Genus <i>Cerasmatrichia</i>	196
Genus <i>Mejicanotrichia</i>	197
Genus <i>Scelobotrichia</i>	198
Tribe Leucotrichiini	199
Genus <i>Acostatrichia</i>	199
Genus <i>Anchitrichia</i>	201
Genus <i>Ascotrichia</i>	202
Genus <i>Betrichia</i>	203
Genus <i>Ceratotrichia</i>	204
Genus <i>Costatrichia</i>	205
Genus <i>Leucotrichia</i>	208
Genus <i>Peltopsyche</i>	214
Genus <i>Tupiniquintrichia</i>	216
Genus <i>Zumatrichia</i>	216
Subfamily Neotrichiinae.....	222
Genus <i>Kumanskiella</i>	222
Genus <i>Mayatrichia</i>	222
Genus <i>Neotrichia</i>	224
Genus <i>Taraxitrichia</i>	246
Subfamily Ochrotrichiinae	247
Genus <i>Angrisanoia</i>	247
Genus <i>Caledonotrichia</i>	248
Genus <i>Dibusa</i>	250
Genus <i>Maydenoptila</i>	250
Genus <i>Metrichia</i>	251
Genus <i>Nothotrichia</i>	266
Genus <i>Ochrotrichia</i>	267
Genus <i>Ragatrichia</i>	295
Genus <i>Rhyacopsyche</i>	295
Subfamily Orthotrichiinae	299
Genus <i>Ithytrichia</i>	299
Genus <i>Orthotrichia</i>	303
Genus <i>Saranganotrichia</i>	334
Subfamily Stactobiinae.....	335
Genus <i>Bredinia</i>	336
Genus <i>Catoxyethira</i>	338
Genus <i>Chrysotrichia</i>	344
Genus <i>Flintiella</i>	350
Genus <i>Maetalaiptila</i>	352
Genus <i>Niuginitrichia</i>	353
Genus <i>Pseudoxyethira</i>	355
Genus <i>Orinocotrichia</i>	361
Genus <i>Plethus</i>	362

Genus <i>Stactobia</i>	365
Genus <i>Stactobiella</i>	383
Genus <i>Tizatetrichia</i>	387
Hydroptilidae incertae sedis	388
Genus <i>Burminoptila</i>	388
Genus <i>Dicaminus</i>	388
Genus <i>Electrotrichia</i>	389
Genus <i>Macrostactobia</i>	389
Genus <i>Novajerseya</i>	389
Genus <i>Orphninostrichia</i>	390
Family Ptilocolepidae	392
Genus <i>Palaeagapetus</i>	392
Genus <i>Ptilocolepus</i>	394
Trichoptera incertae sedis	396
Genus <i>Eutonella</i>	396
Acknowledgements	397
References	397
Index	478

Introduction

Hydroptilidae is the largest of the approximately 50 families in the order Trichoptera containing more than 2,600 species found in all faunal regions of the world and distributed in six subfamilies and 76 genera (including three fossil genera) (Table 1). However, the family is also the smallest family in the order in terms of body size, with adults ranging from between 1.5 mm to usually no more than 5 mm in length (Holzenthal et al. 2007b).

Marshall (1979b) proposed that the family Hydroptilidae contains two subfamilies: Hydroptilinae and Ptilocolepinae, with several tribes included within Hydroptilinae. The subfamily Ptilocolepinae was later elevated to family status (Malicky 2001b, 2008b), restricting Hydroptilidae to a single subfamily, Hydroptilinae, as defined by Marshall (1979b). As a result, all of the tribes originally listed by Marshall were raised to subfamily status and remain so today. Thus, Hydroptilidae now consists of six subfamilies and six unplaced (incertae sedis) genera and Ptilocolepidae consists of two genera. One ‘hydroptilid’ genus, *Eutonella*, is unplaced within the order Trichoptera.

Of the hydroptilid subfamilies, three are largely endemic to the Neotropical faunal region (Leucotrichiinae, Neotrichiinae, and Ochrotrichiinae), though distributions of some of the included species extend well into North America. Hydroptilinae occurs in the Old World, but does include two large cosmopolitan genera (*Hydroptila* and *Oxyethira*) and several genera that are endemic to the Australasian or Afrotropical faunal regions. The subfamily Orthotrichiinae is small, but includes the cosmopolitan genus *Orthotrichia*, and the subfamily Stactobiinae comprises a varied collection of

Table 1. Number of extant and fossil species of Hydroptilidae and Ptilocolepidae, by genus.

Family	Subfamily	Tribe	Genus	Subgenus	No. Species	
					Extant	Fossil
Hydroptilidae						
	Hydroptilinae					
			<i>Acanthotrichia</i>		1	-
			<i>Acritoptila</i>		16	-
			<i>Aenigmatrichia</i>		1	-
			<i>Agraylea</i>			
				<i>Agraylea</i>	8	3
				<i>Nanoagraylea</i>	-	3
			<i>Allotrichia</i>		10	4
			<i>Austratrichia</i>		1	-
			<i>Cyclopsiella</i>		1	-
			<i>Dhatrichia</i>		14	-
			<i>Hellyethira</i>		44	-
			<i>Hydroptila</i>		495	1
			<i>Jabitrichia</i>		4	-
			<i>Kholaptila</i>		1	-
			<i>Maeyaptila</i>		1	-
			<i>Microptila</i>		20	-
			<i>Missitrichia</i>		3	-
			<i>Mulgravia</i>		2	-
			<i>Oxyethira</i>			
				<i>Argyrobothrus</i>	6	-
				<i>Dactylotrichia</i>	16	-
				<i>Dampftrichia</i>	31	-
				<i>Holarctotrichia</i>	11	-
				<i>Loxotrichia</i>	16	-
				<i>Mesotrichia</i>	5	-
				<i>Oxyethira</i>	52	-
				<i>Oxytrichia</i>	19	-
				<i>Pacificotrichia</i>	15	-
				<i>Tanytrichia</i>	20	-
				<i>Trichoglène</i>	25	-
				unplaced	36	1
			<i>Paroxyethira</i>		25	-
			<i>Paucicalcaria</i>		1	-
			<i>Sutheptila</i>		1	-
			<i>Tangatrichia</i>		1	-
			<i>Tricholeiochiton</i>		10	-
			<i>Ugandatrichia</i>		31	-
			<i>Vietrichia</i>		1	-
			<i>Wlitrichia</i>		1	-
			<i>Xuthotrichia</i>		2	-
	Leucotrichiinae					
		Alisotrichiini				
			<i>Alisotrichia</i>		61	1
			<i>Byrsopteryx</i>		16	-
			<i>Celaenotrichia</i>		1	-
			<i>Cerasmatrichia</i>		10	-
			<i>Mejicanotrichia</i>		7	-
			<i>Scelobotrichia</i>		3	-
		Leucotrichiini				
			<i>Acostatrichia</i>		15	-
			<i>Anchitrichia</i>		8	-

Family	Subfamily	Tribe	Genus	Subgenus	No. Species	
					Extant	Fossil
Ptilocolepidae	Neotrichiinae		<i>Ascotrichia</i>		6	-
			<i>Betrichia</i>		10	-
			<i>Ceratotrichia</i>		5	-
			<i>Costatrichia</i>		20	-
			<i>Leucotrichia</i>		45	1
			<i>Peltopsyche</i>		6	-
			<i>Tupiniquintrichia</i>		2	-
			<i>Zumatrichia</i>		53	-
	Ochrotrichiinae		<i>Kumanskiella</i>		2	-
			<i>Mayatrichia</i>		7	-
			<i>Neotrichia</i>		205	-
			<i>Taraxitrichia</i>		1	-
	Orthotrichiinae		<i>Angrisanoia</i>		5	-
			<i>Caledonotrichia</i>		11	-
			<i>Dibusa</i>		1	-
			<i>Maydenoptila</i>		8	-
			<i>Metrichia</i>		141	-
			<i>Nothotrichia</i>		6	-
			<i>Ochrotrichia</i>		221	5
			<i>Ragatrichia</i>		5	-
			<i>Rhyacopsyche</i>		30	-
			<i>Ithytrichia</i>		7	-
			<i>Orthotrichia</i>		271	1
			<i>Saranganotrichia</i>		4	-
	Stactobiinae		<i>Bredinia</i>		17	-
			<i>Catoxyethira</i>		68	-
			<i>Chrysotrichia</i>		70	-
			<i>Flintiella</i>		17	-
			<i>Maetalaiptila</i>		1	-
			<i>Niuginitrichia</i>		24	-
			<i>Pseudoxyethira</i>		64	-
			<i>Orinocotrichia</i>		3	-
			<i>Plethus</i>		27	-
			<i>Stactobia</i>		164	-
			<i>Stactobiella</i>		22	-
			<i>Tizatetrichia</i>		2	-
	<i>incertae sedis</i>		† <i>Burminoptila</i>		-	1
			<i>Dicaminus</i>		1	-
			† <i>Electrotrichia</i>		-	1
			<i>Macrostactobia</i>		2	-
			† <i>Novajerseya</i>		-	1
			<i>Orphninitrichia</i>		20	-
			TOTAL HYDROPTILIDAE		2642	23
Ptilocolepidae			<i>Palaeagapetus</i>		9	2
			<i>Ptilocolepus</i>		8	-
			TOTAL PTILOCOLEPIDAE		17	2
<i>incertae sedis</i>						
		<i>Eutonella</i>		1	-	

genera that are either endemic to a particular region or occur in a wider distribution throughout multiple regions. Ptilocolepidae is distributed throughout the Holarctic faunal region. No larval stages are described for any species in many genera.

General morphology and biology

Hydroptilids, like all Trichoptera, are holometabolous with a terrestrial adult stage and aquatic larval and pupal stages. Members of the family are typically minute, with few exceeding 5.0 mm in body length, which has led to their common name, of micro-caddisflies. The adults are attracted to ultraviolet lights and may congregate in huge numbers at collecting sites, giving them the potential to be one of the most commonly collected of all Trichoptera. An in-depth account of hydroptilid morphology will not be given here; however, features that have traditionally been considered of importance for hydroptilid taxonomy are briefly described.

Larva

Hydroptilids display various structural adaptations to the wide range of aquatic environments they occur in, making them one of the most diverse caddisfly families regarding the form of larvae and larval cases (Marshall 1979b). In Nielsen's (1948) classic work on hydroptilid larvae, he gave a very detailed account of larval morphology and biology; unfortunately, it is a fairly limited view of the family as a whole, since he expounded on only five of the more specialized genera within Hydroptilidae (*Agraylea*, *Hydroptila*, *Ithytrichia*, *Orthotrichia*, and *Oxyethira*). However, Nielsen's work laid an excellent foundation for future trichopterists and made Marshall's (1979b) more general account of larval morphology possible.

One of the characteristic features of hydroptilid larvae is the simple form of hypermetamorphosis they undergo. Marshall (1979b) commented that it had not been confirmed if ptilocolepid larvae also undergo hypermetamorphosis, but it has since been confirmed that ptilocolepids do experience the same changes, although not as pronounced as those of the hydroptilids (Wells 2010b). Early instars I–IV of both families are relatively smaller (0.5–2.7 mm in length), of short duration, and caseless, i.e., “free-living”, while final instar V is larger (2.0–7.0 mm in length) and constructs a portable or secondarily fixed case (Marshall 1979b). The final instar also functions as the primary feeding and growing stage in the hydroptilid life cycle, during which the abdomen becomes greatly enlarged (Marshall 1979b) or physogastric. The early instars I–IV can be characterized by features associated by their absence of a case, including narrowly tapering abdomens, freely projecting anal prolegs; the long, fine setae on the body can offer resistance to sinking and help the larva to swim and disperse (Marshall 1979b). The duration of these free-living stages is usually much shorter than the final instar. In only a very few species is the final instar also free-living.

The case-building larvae of instar V are prognathous and campodeiform, similar to the “saddle-case” bearing glossosomatids, as opposed to the hypognathous and

eruciform “tube-case” building families (Marshall 1979b). Instar V tends to be more easily identified and distinct among the genera and can be separated from all other Trichoptera larvae by a combination of features, including the enlarged abdomen, three pairs of well-developed thoracic tergites, the absence of segmentally arranged tracheal gills, fusion of the well-developed abdominal prolegs to the sides of abdominal segment X, and, while the number of abdominal tergites may vary, one is always present on abdominal segment IX (Marshall 1979b; Wiggins 1996). Hydroptilid larvae have dorsal sclerotized rings on abdominal segments II/III to VII/VIII which have not been recorded in ptilocolepid larvae; these rings may be regions of specialized chloride epithelial cells adapted for ion absorption and osmoregulation (Wichard 1976; Wiggins 1977). Features of the thoracic legs of instar V have proven useful at the generic level in hydroptilid taxonomy; for example, though basically ambulatory, they may be modified to be robust for clinging to substrate in swiftly moving waters, long and slender in vegetation dwellers, or may bear a specialized process that aids in the manipulation of algal filaments (Marshall 1979b). In instar V, the abdomen becomes hugely distended; the overall form and shape of the abdominal expansion is unique and typically characteristic for each genus (Marshall 1979b). Unique among trichopteran, members of the genus *Orthotrichia* have a pronounced triangular ‘tooth’ on the larval labrum.

The larval case constructed during the final instar is often referred to as a “purse-case”, a term coined by Ross (1967) to separate hydroptilid cases from glossosomatid “saddle-cases” and phryganidean (sensu Thomas et al. 2020) “tube-cases”. The typical “purse-case” consists of two closely apposed silken halves into which various organic or inorganic particles may be incorporated; the two halves are joined along the lateral margins, leaving narrow openings at the anterior and posterior ends, and may be either laterally or dorso-ventrally compressed (Stephens 1836; Marshall 1979b). As the larval abdomen increases in size during the final instar, the case is expanded by splitting the margins, adding new layers of silk, and then resealing them (Nielsen 1948; Wiggins 1996).

Pupa

As in most Trichoptera, hydroptilid pupae are exarate, dectitious, and do not offer many features useful for identification past the family level (Marshall 1979b). Aside from the absence of any structural features used to positively characterize other caddis families, hydroptilid pupae might be recognized by the absence of abdominal gills or lateral lines, the presegmental dorsal abdominal plates on segments III–VII, the postsegmental plates on segments III–V, and their relatively small size (1.5–6.0 mm in length) (Marshall 1979b). Overall, the pupal case is similar to the larval case, but firmly attached to the substrate with the anterior and posterior openings sealed; once the case is attached and sealed, the larva spins one final internal lining and adopts a characteristic resting posture in which the thorax becomes distended, the abdomen straightens, and the intersegmental grooves become less obvious (Barnard 1971). Ptilocolepid and hydroptilid pupae can be separated based on the presence or absence of medial teeth on the mandibles: in Hydroptilidae medial teeth are absent, while in Ptilocolepidae either one (*Palaeagapetus*) or two (*Ptilocolepus*) teeth are present (Marshall 1979b).

Adult

Features that comprise the generally accepted typical hydroptilid form include small size (1.2–6.0 mm forewing length); narrow, pointed wings with long setal fringes along the anal margin and reduced venation; a dense layer of setae on the wings and body parts creates a general appearance of pubescence (Stephens 1836; Marshall 1979b). While most genera bear setae that are white and either black or brown in hue, giving them a mottled appearance, some tropical genera are known to exhibit patches of distinct metallic hues. As the overall size of genera decreases, the wings also become reduced, leading to decreasingly distinct venation and increasingly longer setal fringes that compensate for the loss of wing membrane area (extreme examples of reduced wings and venation can be seen in the genera *Chrysotrichia* and *Neotrichia*) (Stephens 1836; Marshall 1979b). Because of this reduction in venation, venational features that are of taxonomic importance in other families of larger caddisflies are not constant in hydroptilid genera and are considered unreliable taxonomic characters.

On the head capsule, dorsal ocelli vary from none to two or three and, posteriorly, there is typically a pair of dorsal postoccipital lobes or warts which may be modified as eversible scent-dispersing organs (e.g., *Hydroptila*). In some genera (e.g., *Leucotrichia*), the head may bear modifications, such as patches of scales or setiferous protuberances. Antennal segments, typically the basal-most, in some genera may also be modified to appear elongated or enlarged. On the thorax, the angular warts and near-vertical posterior face of the mesoscutellum are distinct characters for the family. Additional taxonomically important features on the thorax at the subfamily and generic levels include the shape of the meso- and metathoracic nota and the presence or absence of transverse sutures. The posterior mesothoracic katepisternal suture is typically present in ptilocolepids and absent in hydroptilids, a feature first noted by Ross (1956) and later confirmed by Marshall (1979b). Wings of some genera may also bear modifications (e.g., *Peltopsyche*, *Costatrichia*), such as patches of scales or a costal “pouch” or “bullae”. The spur formula, which refers to the number of spurs present on the tibiae, is another important diagnostic feature used in hydroptilid taxonomy. The formula indicates the number of spurs on the fore-, mid-, and hind tibiae, respectively, with four being the maximum number of spines on any one leg (two preapical and two apical) (Marshall 1979b); for example, the formula for the genus *Leucotrichia* is 1, 3, 4.

The hydroptilid abdomen consists of the typical eleven basic segments, with segments X and XI generally being regarded as one, and the sclerites of the posterior segments modified to form the genitalic structures, which provide features of taxonomic importance at both the generic and specific levels; most hydroptilid species are known from male specimens only. Segment IX forms a distinct genital capsule with a membranous posterior concavity, out of which originates segment X, the phallus, and any ventral appendages (Marshall 1979b). Segment X is present as a tergite only, is usually completely membranous but may be weakly sclerotized, varies considerably in size and shape, and may fuse ventrally with structures beneath the phallus to form a structure known as the “phallic tube” or “phallocrypt” (Marshall 1979b). Inferior appendages,

often referred to as “claspers”, are single-segmented, in contrast to the 2-segmented condition generally found in many other caddis families, and vary greatly in size, shape, and whether or not they bear additional processes or setae; these appendages can provide taxonomically important features at both the generic and specific levels (Marshall 1979b). The phallus (also sometimes referred to as the aedeagus, penis, or copulatory organ) is essentially a long, slender, sclerotized tube that varies structurally between groups. In the Hydroptilinae, Neotrichiinae, and Orthotrichiinae, the phallus bears a spiral “titillator” and is divided into a proximal half bearing an ejaculatory duct and a distal half bearing an intromittent organ. In Leucotrichiinae, the phallus bears a complicated median complex with “windows”, “loops”, and a membranous apex. In Ochrotrichiinae, the phallus may be very slender or heavily spined, whereas in Stactobiinae, the phallus is essentially a common median duct bearing a pair of lateral processes that may be fused (Marshall 1979b). Overall, not much is really known about the comparative morphology of hydroptilid male genitalia, and the terminology of different structures varies greatly between authors. For example, Marshall (1979b) uses the term “subgenital” to refer to any structures occurring ventral to the phallus; when separate and paired, she calls them “appendages” (which have been referred to variously as “intermediate appendages”, “lateral penis-sheaths”, or “parameres”) and when they are fused refers to the structure as a “plate” (“lower penis cover” or “ventral plate of X”). Oláh and Johanson (2008) argued for the use of appendicular terminology (“gonopods”, “paraprocts”, “cercus”, etc.) over the directional terms (appendages referred to as “inferior”, “intermediate”, “superior”, etc.). Their work, however, addressed Trichoptera as a whole and did not address the complex genitalia of Hydroptilidae in specific, as Marshall’s (1979b) monograph did. Further work regarding hydroptilid male genitalia is needed to infer the homology of these structures.

Female genitalia of hydroptilids are of the generalized trichopteran condition, a simple “telescopic ovipositor” or “oviscapt” which consists of modified abdominal segments VIII–X and a gonopore occurring ventrally between segments IX and X (Scudder 1971; Marshall 1979b). The posterior margin of the ringlike segment VIII provides features that can be of taxonomic importance, such as dorsal and ventral processes or rows or setae (Marshall 1979b).

Ptilocolepidae

While some of the above description can be extended to the ptilocolepids, there are some fundamental differences that can be used to differentiate between the two families. Although ptilocolepid larvae closely resemble those of hydroptilids, the adults look more similar to small rhyacophilids or glossosomatids. They are relatively larger than hydroptilids (4.0–6.0 mm in length) and their wings are relatively broad with rounded apices and short marginal setal fringes (Marshall 1979b). The wings also boast a much more complete venation that resembles that of primitive rhyacophilids, differing in the subcosta of the forewing and the fusion of various veins in the hindwing (Ross 1956). Ptilocolepid venation differs from hydroptilids by the presence of a distinct

discoidal cell, separate M_3 and M_4 , and a forked Cu_1 in the forewing (Marshall 1979b). Additionally, ptilocolepids bear short, unmodified macrotrichia in a sparse, scattered distribution on their body, which gives them more of an overall granulose appearance, rather than pubescent.

Taxonomic history

Hydroptilidae

The family Hydroptilidae was established in 1836 by Stephens for the genera *Hydroptila*, *Agraylea*, and *Narycia*. However, the only species of the genus *Narycia* that was figured, *Narycia elegans*, subsequently proved to be a moth from the family Psychidae. The remaining genera, *Hydroptila* and *Agraylea*, could be distinguished from other trichopteran families by the “cleft-like” openings of the larval cases and by the filiform antennae and unfolded posterior wings of the adults (Marshall 1979b). The cases and larvae of *Hydroptila pulchricornis* and *Oxyethira flavicornis* had actually been described previously by Pictet (1834) as a unique taxon under the general name “les Hydroptiles”. For this reason, McLachlan (1880) considered Pictet (1834), and not Stephens, to be the true founder of the family Hydroptilidae.

In 1948, Nielsen made the first attempt to divide Hydroptilidae, which was proving to be a large and heterogeneous group, into subfamilies. Based on morphological similarities of the larvae, he proposed the subfamilies Orthotrichiinae for the genera *Ithytrichia* and *Orthotrichia* and Hydroptilinae for the genera *Agraylea*, *Hydroptila*, and *Oxyethira*. While other genera, such as *Ptilocolepus* and *Stactobia*, had been established by this time, Nielsen commented on their relative position within the family but declined to formally place them in either of his proposed subfamilies. At this time, Nielsen also placed Hydroptilidae between the “saddle-case” building Glossosomatinae and the “tube-case” building Integripalpia, based on features of the larvae and pupae. In this work, Nielsen described in great detail the morphology, life histories, and feeding and case building behaviors of five microcaddisfly genera, which provided a very accurate, but fairly restricted, overview of microcaddisflies in general.

Botosaneanu (1956) established the subfamily Stactobiinae for the previously unplaced genus *Stactobia* and what he referred to as “its immediate relatives”, which most likely included the genera *Plethotrichia*, *Plethus*, *Lamonganotrichia*, *Stactobiella*, and probably *Catoxyethira* (Marshall 1979b).

In Ross’s (1956) new classification, the “purse-case” making hydroptilids, included in the “case-maker division”, were divided into the subfamilies Ptilocolepinae for the genera *Palaeagapetus* and *Ptilocolepus*, and Hydroptilinae for the remaining genera; Hydroptilinae was further divided into the tribes Hydroptilini and Neotrichiini. Flint (1970) later declined to follow Ross’s (1956) classification and proposed another new classification with the subfamily Leucotrichinae (subsequently corrected to Leucotrichiinae) for the genus *Leucotrichia* and its related genera and retained Hydroptilinae, Orthotrichiinae, Ptilocolepinae, and Stactobiinae as separate and distinct subfamilies.

Marshall (1979b) provided the first review of Hydroptilidae at the generic level, including all 42 genera described at the time. For each genus, she included information regarding nomenclature, distribution, morphology of adult and immature stages, biology, and possible species groupings. Marshall also provided keys to the subfamilies, at the time considered tribes, for the adult stage and to the genera for both the adult and immature stages. She discussed the phylogeny of the family and offered a new classification. Marshall's proposed classification was based on that of Ross (1956) by recognizing only two subfamilies, Hydroptilinae and Ptilocolepinae. However, it also reflected the classification proposed by Flint (1970) by dividing Hydroptilinae into six tribes that corresponded to the subfamilies he had proposed: Hydroptilini, Leucotrichiini, Neotrichiini, Ochrotrichiini, and Stactobiini, and the newly proposed Ochrotrichiini. The morphology-based phylogeny proposed by Marshall was not backed by any statistical analyses and therefore offered no support values for any of the proposed relationships. Marshall's phylogeny represents the last attempt to assess the relationships of the subfamilies and genera of Hydroptilidae as a whole.

In 2010, Wells wrote a review of hydroptilid studies published from the time of Marshall's (1979b) review up through 2009; in this work, she reviewed hydroptilid taxonomy, included new discoveries regarding aspects of the biology of some species, and suggested that future work should place emphasis on life history studies.

In 2011, Oláh and Johanson produced a paper in which they described many new species from the Neotropical faunal region and referred to the subfamilies as tribes. In this work, Oláh and Johanson provided several tables containing either features or character states of species groups, subgenera, generic clusters, or genera in tribes. However, the tables did not cover all of the taxa present in the paper, no information on generic features or character states was provided for *Hydroptila* or any of the included stactobiine genera (*Bredinia*, *Flintiella*, and *Orinocotrichia*), nor was there any discussion of the information outlined in the tables. As interpreted from the tables, several genera were transferred between subfamilies or from incertae sedis status.

The most recent update to hydroptilid classification was based on a phylogenetic assessment of Leucotrichiinae using both molecular and morphological data (Santos et al. 2016a). The nomenclatural modifications proposed in the paper included the recognition of two tribes within Leucotrichiinae, Alisotrichiini, and Leucotrichiini, one generic synonymy, and one newly established genus. Santos et al. also discussed potential convergent evolution between Leucotrichiinae and Stactobiinae in this work.

Ptilocolepidae

The family Ptilocolepidae, which was once considered to be a group within Hydroptilidae and is considered in recent classifications as a distinct family, includes the genera *Ptilocolepus* and *Palaeagapetus*. The type species was originally described in *Rhyacophila* and therefore placed in the family Rhyacophilidae (Pictet 1834), but was subsequently shown to be a senior synonym of *Ptilocolepus turbidus*, making the type species *Ptilocolepus granulatus* (Hagen 1855). Thienemann (1904a) noted similarities between

the larvae of *P. granulatus* and both members of Hydroptilidae and Glossosomatidae, which led Ulmer (1907) to transfer the genus to Hydroptilidae. Subsequently, Martynov (1913b) established the subfamily Ptilocolepinae for *Ptilocolepus*, but it was retained in Rhyacophilidae. Ross (1956) transferred Ptilocolepinae to Hydroptilidae and redefined it to include *Palaeagapetus* (incorrectly referring to it as Palaeagapetinae). Kristensen (1997) suggested that *Ptilocolepus* and *Palaeagapetus* together may represent the sister group of all other Trichoptera.

In 2001, Ptilocolepidae was elevated to the family status, which is currently recognized, effectively also elevating each of the six tribes within Hydroptilinae to the rank of subfamily (Malicky 2001b). Malicky claimed that previous authors had placed differing levels of importance on morphological features of either the adults or the larvae, which led to the group being placed in different families at different times. He stated that, because all these characters should be considered equally, it was appropriate to raise the group to family rank of Ptilocolepidae. Subsequently, the deeper-level relationships within Trichoptera were explored using molecular data and both the monophyly of Ptilocolepidae and its status as a family were questioned (Holzenthall et al. 2007a). According to the work of Holzenthall et al. (2007a), Ptilocolepidae consistently groups with Hydroptilidae, indicating that the elevation to family status might be an unnecessary taxonomic change. Malicky (2008b) countered by referring to the differences in geographical distribution of the two families, stating that the high level of endemism shown by Hydroptilidae and the relictual distribution of Ptilocolepidae were additional evidence that the families are distinct from one another. In their work resolving a higher-level phylogeny of Trichoptera based on multiple genes, Thomas et al. (2020) concluded that Ptilocolepidae is a monophyletic unit, sister to Hydroptilidae.

Other checklists, catalogs, and bibliographies

In preparing this catalog, several published (or electronic) resources concerning Trichoptera fauna were consulted. In all cases, the accuracy of the names, citations, or listings in these works were checked and corrected as necessary before inclusion in the present catalog. However, as these former works may be useful to the user of this catalog in further research on the microcaddisfly fauna, these works are listed and discussed below.

The world catalog, 'Trichopterorum Catalogus', Volumes I–XV + Index, 1960–1973, by F.C.J. Fischer is an indispensable and first source of taxonomic and associated literature pertaining to Trichoptera. The catalog and its supplements cover all literature from 1758 to the end of 1960. Volume II and Volume XII (Fischer 1961, 1971) cover literature addressing Hydroptilidae, making them important resources for this catalog. The world bibliography, 'Bibliographia Trichopterorum', by A.P. Nimmo (1996) is another important compilation of trichopteran literature references; Volume 1, the only published volume, covers literature from 1961 to 1970. The searchable World 'Trichoptera Checklist' is available over the World Wide Web [www.entweb.sites.clemson.edu/database/trichopt/]. Morse (1997b) discussed the format of this checklist.

Another important source of information was the checklist of Neotropical Trichoptera fauna first organized by Flint et al. (1999a) and updated by Holzenthal and Calor (2017). This checklist was extremely helpful both for providing an excellent starting point for covering the Neotropical region, an extremely diverse region for microcaddisflies, but also for providing an organizational structure that could be reproduced in this catalog. ‘Zoological Record’ and other electronic abstracting services (e.g., ‘Web of Science’) are of paramount importance in accessing the taxonomic literature.

Purpose of the catalog

A catalog is a list of nominal species and associated taxonomic and nomenclatural references arranged in a logical, easily accessible format. Catalogs are important tools to anyone requiring knowledge of currently accepted names, including synonyms and distributional data. Because the binomen is usually the starting point of the information storage and retrieval system afforded by the Linnaean hierarchy, an accurate list of currently accepted species names is essential for anyone needing information about a species, be it for basic or applied research. By accumulating and organizing all the previously published microcaddisfly (Hydroptilidae, Ptilocolepidae) taxonomic information into a single, easily accessed source, I hope to facilitate and stimulate further exploration and research on the fauna. Furthermore, I hope that this catalog benefits research beyond general Trichoptera systematics, such as ecology, behavior, conservation, and the application of Trichoptera as biological indicators of water quality.

Format of the catalog

This catalog follows the format used in the Neotropical Trichoptera catalogs produced by Flint et al. (1999a) and Holzenthal and Calor (2017): organization is alphabetic by family, subfamily, tribe (when applicable), genus, and species. A single genus currently considered incertae sedis within Trichoptera, but previously included within Hydroptilidae, is listed at the end. Valid family names are presented in **boldface** type, centered on the page, and followed by the author. A family synonymy follows, which includes the currently recognized, valid family name, followed by its author, date and bibliographic citation of publication, and page number on which the name was formally established. Following this, in square brackets, the type genus with author and date is presented. Other citations containing other important nomenclatural acts, taxonomic revisions, or generic keys are next included with annotations added in square brackets. Following the family synonymy, introductory information, including literature citations, of a general nature is given concerning distribution, diversity, taxonomy, biology, habitat, and knowledge of larval states, if available. For simplicity, unless otherwise specified, the larvae referred to are final instar larvae.

In hierarchical order, valid subfamily and tribe names are next presented in **boldface** type, centered on the page, and followed by the author, each followed by the synonymy. The currently recognized, valid taxon name is followed by its author, date

and bibliographic citation of publication, and page number on which the name was formally established. Following this, in square brackets, the type genus with author and date is presented. Other citations containing other important nomenclatural acts, taxonomic revisions, or generic keys are next included with annotations given in square brackets. Following the subfamily or tribe synonymy, introductory information similar to that presented for the family is given.

Valid generic names are next presented in **boldface** type, centered on the page, and followed by the author. A generic synonymy follows. The currently recognized, valid genus name is followed by its author, date and bibliographic citation of publication, and page number on which the name was formally established. Following this, in square brackets, the type species in its original combination with author and date is presented, the manner in which the type species was established (e.g., original designation, monotypy, subsequent selection, etc.), and the family in which it was originally described if different from the current family. Other citations containing other important nomenclatural acts, generic revisions, or larval descriptions are included next with annotations added in square brackets. Generic synonyms follow, in chronological order (oldest names first), and are presented in the same format and with the same information as presented for the valid genus name, with the addition of the citation where the generic synonymy was established. Subgeneric names are presented as generic synonyms and with the same information, but the subgeneric status is so indicated and the citation included. Following the generic synonymy, introductory information on the genus, similar to that presented for the family, is given.

All currently recognized, valid species and subspecies names (specific epithets only), in their current orthography, are then listed in alphabetical order and in **boldface italic** type. Fossil species (and genera) are preceded by the symbol †. In cases where subgenera are used, the subgenus name follows the specific epithet, in parentheses. Each species name is followed by author, date and bibliographic citation of publication, and page number on which the name was formally established. Following, in square brackets, the type locality is presented, annotated for clarity, but otherwise given as indicated in the original publication, except the country of origin is always listed first. The type depository is then given if known, and indicated thus if unknown, according to the institution codes presented below. Sex of the type is presented next, if known, and so indicated if not known. Sex of type is followed (separated by a semicolon) by the sex or stage of any other specimens illustrated and described with the type specimen (these also separated by semicolons). Finally, still in square brackets and separated by a semicolon, the genus of the original combination, or the original orthography of the specific epithet if different from present orthography, is presented. In addition, citations for any significant publications containing redescrptions, lectotype or neotype designations or other nomenclatural acts, systematic revisions, larval descriptions, or new distribution records follow their appropriate species' entries. Synonyms are indicated in *italics*, preceded by an em dash (—), and listed in chronological order (if more than one) and in their present orthography under the valid species entry. All species-group synonyms are included in the catalog. Information presented for synonyms is the same as presented for the

senior name (date and bibliographic citation of the synonymy, sex of type, type depository, genus of original combination or original orthography), but also includes the date and bibliographic reference where the synonymy was established. Lastly, for each species entry the distribution by country, based on published records, is presented.

In addition to original citations and important taxonomic or nomenclatural works, all recent and important literature published after 1960 is included in the catalog. However, the extensive bibliographies presented by Fischer (1960–1973) for the literature prior to 1961 are NOT repeated in this catalog if not of primary importance. The reader is referred to Fischer's catalog, 'Trichopterorum Catalogus' for this additional literature.

All literature cited in the introduction and catalog itself is listed in the References section. The complete title of the journal, book, or other bibliographic source is given to assist the user in obtaining literature. In all cases, the original citation was consulted by the author in compiling the catalog to ensure accuracy of information or to check date of issue.

The catalog includes all literature known to me up to the end of 2020. The user is cautioned, however, that I make no claims to have included all the literature published in 2020, and certainly not later, but I have done my best to do so. Some literature is not abstracted in 'Zoological Records or Web of Science' until several years after its date of publication and thus may have been missed. Again, the user should check the appropriate bibliographic sources to ensure complete coverage and overlap by several years the bibliography in this catalog when searching the literature in the future.

The catalog ends with an Index that lists all names presented in the catalog and the primary page number where the name occurs. Format of names in the index generally follows that presented in the catalog: valid species and subspecies epithets are presented in bold italics, followed by the current genus in italics; synonyms of species or subspecies names are presented in italics, followed by the current genus in italics. The original orthography of species names, including synonyms, is also indexed, but referred to the species in its current combination and orthography. For subspecies names, the trinomen is also indexed, but referred to the name in combination with the nominotypical name. Homonyms are also indexed, but with the author of the name and date of publication included. Valid genus names are presented in bold, followed by the family in square brackets. Generic synonyms are presented in italics, except that currently recognized subgeneric names are presented in bold italics, both followed by the family in square brackets. Fossil species are followed by the symbol †.

List of type depositories

Depository codes have been sourced from the GBIF Registry of Scientific Collections, The Insect and Spider Collections of the World Website, and original publications (Evenhuis 2021; GBIF 2022). If a code could not be found in these three sources, a code was assigned for use in this catalog.

AMGS
AMNZ

Albany Museum, Grahamstown, Cape Province, South Africa
Auckland Institute and Museum, Auckland, New Zealand

ANIC	Australian National Insect Collection, CSIRO, Canberra City, Australian Capital Territory, Australia
ANSP	Academy of Natural Sciences, Philadelphia, Pennsylvania, USA
CAS	California Academy of Sciences, San Francisco, California, USA
CBGP	Centre de Biologie pour la Gestion des Populations, Campus International de Baillarguet, Montferrier-sur-Lez, France
CBM-ZI	Natural History Museum and Institute of Chiba, Chiba, Japan
CLEV	Cleveland Museum of Natural History, Cleveland, Ohio, USA
CMNH	Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA
CMNZ	Canterbury Museum, Christchurch, New Zealand
CMOR	Moretti collection, University of Perugia, Perugia, Italy
CNC	Canadian National Collection of Insects, Ottawa, Ontario, Canada
CNIN	Colección Nacional de Insectos, Instituto de Biología, Universidad Nacional Autónoma de México, Mexico City, Mexico (formerly IBUNAM)
Collection Banks	private collection, Nathan Banks, likely deposited in MCZ
Collection Henderson	private collection, Ian M. Henderson, Massey University, Palmerston North, New Zealand
Collection Malicky	private collection, Hans Malicky, Lunz am See, Austria
Collection Mey	private collection, Wolfram Mey, Berlin, Germany
Collection Moretti	private collection, G. Moretti, University of Perugia, Italy
Collection Oláh	private collection, János Oláh, Debrecen, Hungary, presently under protection of HNHM
Collection Tillyard	private collection, R. J. Tillyard, deposited in NHMUK
Collection Wichard	private collection, Wilfried Wichard, Bonn, Germany
COZEM	Colección Zoológica Dr. Eustorgio Méndez, Instituto Conmemorativo Gorgas de Estudio de la Salud, Panama City, Panama
CUAC	Clemson University, Clemson, South Carolina, USA
CZMA	Coleção Zoológica do Maranhão, Universidade Estadual do Maranhão, Caxias, Maranhão, Brazil
DSIR	Department of Scientific and Industrial Research, Cawthron Institute, Nelson, New Zealand
DZRJ	Coleção Entomológica Prof. José Alfredo Pinheiro Dutra, Departamento de Zoologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil
DZUSC	M. A. González collection, Department of Zoology, University of Santiago de Compostela, Santiago de Compostela (La Coruña), Galicia, Spain
EIHU	Entomological Institute of Hokkaido University, Sapporo, Hokkaido, Japan

EMEC	Essig Museum of Entomology, University of California, Berkeley, California, USA
ETSI	Departamento de Zoología y Entomología, Escuela Técnica Superior de Ingeniería de Montes, Madrid, Spain
ESUW	University of Wyoming, Laramie, Wyoming, USA (includes D. G. Denning's personal collection)
FHCU	Facultad de Humanidades y Ciencias (Departamento de Artrópodos), Universidad de la Republica, Montevideo, Uruguay
FSCA	Florida State Collection of Arthropods, Gainesville, Florida, USA
HAUZ	Henan Agricultural University, Zhengzhou, Henan, China
HNHM	Hungarian Natural History Museum, Budapest, Hungary
HUAT	Hacettepe University, Beytepe, Ankara, Turkey
IBSS-RAS	Institute of Biology and Soil Sciences of Russian Academy of Sciences, Vladivostok, Russia
ICN	Institute of Natural Sciences, Universidad Nacional de Colombia, Bogotá, Colombia
IFML	Instituto Fundación Miguel Lillo, Tucumán, Argentina
INBIO	Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica
INHS	Illinois Natural History Survey, Champaign, Illinois, USA
INPA	Nacional de Pesquisas da Amazônia, Manaus, Amazonas, Brazil
IRSNB	Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium
IZSK	I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine, Kiev, Ukraine
KMUL	Karl-Marx-University, Leipzig, Germany
KUM	Kyoto University Museum, Kyoto, Japan
LIPI	Indonesian Institute of Sciences, Jakarta (Bogor), West Java, Indonesia
LNKD	Landessammlung für Naturkunde, Karlsruhe, Germany
MACN	Museo Argentina de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, Argentina
MBBJ	Museum Zoologicum Bogoriense, Bogor, Indonesia
MBCG	Museo di Scienze Naturali "Enrico Caffi", Bergamo, Italy
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA
MDLA	Museu do Dundo, Luanda, Angola
MHNJP	Museo de Historia Natural "Javier Prado", Universidad Nacional Mayor de San Marcos, Lima, Peru
MIUP	Universidad de Panamá Museo de Invertebrados, Panama

MLPA	Museo de la Plata, Universidad Nacional de La Plata, La Plata, Argentina
MNHN	Muséum National d'Histoire Naturelle, Paris, France
MNRJ	Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil (including F. Müller material)
MPEG	Museu Paraense Emílio Goeldi, Belém, Pará, Brazil
MPMP	National Museum of the Philippines, Manila, Philippines
MRAC	Musée Royal de l'Afrique Centrale, Tervuren, Belgium
MZBS	Museo de Zoologia, Barcelona, Spain
MZHF	Finnish Museum of Natural History, Helsinki, Finland
MZLS	Musée Zoologique, Lausanne, Switzerland
MZLU	Lund University, Lund, Sweden
MZPW	Polish Academy of Science, Museum and Institute of Zoology, Warsaw, Poland
MZUFBA	Museu de Zoologia da Universidade Federal da Bahia, Salvador, Brazil
MZUSP	Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil
MZVU	Museum of Zoology, Vilnius University, Vilnius, Lithuania
NHMUK	Natural History Museum London, United Kingdom [formerly British Museum (Natural History), BMNH or NHM],
NAUJ	Nanjing Agricultural University, Nanjing, Jiangsu, China
NHMB	Naturhistorisches Museum, Basel, Switzerland
NHMW	Naturhistorisches Museum Wien, Vienna, Austria
NHRS	Naturhistoriska Riksmuseet, Stockholm, Sweden
NIBR	National Institute of Biological Resources, Incheon, South Korea
NMID	National Museum of Ireland, Dublin, Ireland
NMNH	National Museum of Natural History, Washington, DC, USA [formerly United States National Museum, USNM]
NMNS	National Museum of Natural Science, Taichung, Taiwan
NMPC	National Museum (Natural History), Prague, Czech Republic
NMPG	Museum der Natur-Gotha, Gotha, Germany
NMV	Museums Victoria, Melbourne, Victoria, Australia [formerly National Museum of Victoria]
NMZ	National Museum of Zimbabwe, Harare, Zimbabwe
NTM	Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia
NZAC	New Zealand Arthropod Collection, Landcare Research, Auckland, New Zealand
NZSI	National Zoological Collection, Zoological Survey of India, Calcutta, West Bengal, India

PSUC	Frost Entomological Museum, Pennsylvania State University, University Park, Pennsylvania, USA
QMB	Queensland Museum, South Brisbane, Queensland, Australia
QMOR	Collection Entomologique Ouellet-Robert, University of Montreal, Montreal, Quebec, Canada
RMNH	Naturalis Biodiversity Centre, Leiden, Netherlands [formerly Rijksmuseum van Natuurlijke Historie]
ROM	Royal Ontario Museum, Toronto, Ontario, Canada
SAMC	Iziko Museum of Capetown, Cape Town, South Africa [formerly South African Museum]
SOFM	National Museum of Natural History, Sofia, Bulgaria
TAU	Tel Aviv University, Tel Aviv, Israel
UMQ	University of Montreal, Montreal, Quebec, Canada
UMSP	University of Minnesota, St. Paul, Minnesota, USA
UNHC	University of New Hampshire, Durham, New Hampshire, USA
UOBF	University of Ouagadougou, Ouagadougou, Burkina Faso
UPLB	Museum of Natural History, University of the Philippines Los Baños, Los Baños, Laguna, Philippines
USCM	“Luis Iglesias” Museum of Natural History, University of Santiago de Compostela, Santiago de Compostela (La Coruña), Galicia, Spain
VNMN	Vietnam National Museum of Nature, Hanoi, Vietnam
WAM	Western Australia Museum, Perth, Western Australia, Australia
ZIN	Academy of Sciences, Zoological Institute, St. Petersburg, Russia
ZMHB	Museum für Naturkunde der Humboldt-Universität, Berlin, Germany
ZMUA	Zoölogisch Museum, Instituut voor Taxonomische Zoologie, Universiteit van Amsterdam, Amsterdam, Netherlands
ZMUB	Zoological Museum, University of Bergen, Bergen, Norway
ZMUC	Zoological Museum, University of Copenhagen, Copenhagen, Denmark
ZMUH	Zoologisches Institut und Zoologisches Museum, Universität von Hamburg, Hamburg, Germany [formerly Zoologische Staatsinstitut und Zoologisches Museum]
ZRC	Zoological Reference Collection, Raffles Museum of Biodiversity Research, National University of Singapore, Singapore
ZSM	Zoologische Staatssammlung München, Munich, Germany

Catalog

Family HYDROPTILIDAE Stephens, 1836

Hydroptilidae Stephens, 1836: 151 [type genus: *Hydroptila* Dalman, 1819]. —McLachlan 1880: 501 [revision synopsis]. —Betten 1934: 145 [key to genera]. —Barnard 1934: 390 [key to African genera]. —Milne 1936: 74 [key to North American species]. —Mosely 1939b: 252 [key to British genera]. —Ross 1944: 117–119 [generic key to larvae and adults]. —Kimmins 1951: 194 [key to genera of India]. —Leader 1970: 121 [setae]. —Neboiss 1977: 39 [key to Tasmanian genera]. —Marshall 1979b: 135 [family monograph; key to genera]. —Blickle 1979: 3 [key to genera America north of Mexico]. —Wells 1990b: 365 [key to genera of North Sulawesi]. —Wells and Dudgeon 1990: 162 [key to males of Hong Kong]. —Wells 1991: 498 [key to males and mature larvae of genera in New Guinea]. —Botosaneanu 1992: 39 [key to genera in the Levant]. —Wells and Andersen 1995: 145 [key to genera and species in Tanzania]. —Wiggins 1996: 1–457 [larvae of the North American genera]. —Solem and Gullefors 1996: 234 [key to genera for larvae in North Europe]. —Moulton and Stewart 1996: 89 [keys to the larvae and adults of genera and species in the Interior Highlands of North America]. —Waringer and Graf 1997: 72 [atlas of species in Australia central Europe and Palearctic region; key to larvae]. —Wells 1997: 1–28 [checklist key to Australian larvae]. —Kachalova in Medvedev 1998: 179 [key to the genera of the European part of the USSR]. —Flint et al. 1999a: 82 [catalog of Neotropical species]. —Wallace et al. 2003: 74 [generic key to larvae of United Kingdom and Ireland]. —Posada-García and Roldán-Pérez 2003: 183 [generic key to Colombian]. —Pescador et al. 2004: 48 [key to final instar larvae of Florida USA]. —Waringer and Graf 2011: 72 [key to European larvae]. —Wichard 2013: 37 [key to fossil Hydroptilidae in Baltic amber]. —Rinne and Wiberg-Larsen 2017: 38 [key to larvae of Finland]. —Armitage and Harris 2018b: 95 [review of diversity of Panama]. —Wells 2020: 24 [review of Australian cases].

The family Hydroptilidae exhibits a cosmopolitan distribution, with members occurring in all major faunal regions except for Antarctica. Currently recognized within the family are six distinct subfamilies, containing more than 2,600 species: Hydroptilinae, Leucotrichiinae, Neotrichiinae, Ochrotrichiinae, Orthotrichiinae, and Stactobiinae. Each subfamily can be characterized by fundamental morphological features of the adult, larval, and pupal stages (Marshall 1979b). Despite the heterogeneous nature of the family, these features unite the subfamilies and can be used to separate them from the genera of Ptilocolepidae. Both cool- and warm-adapted genera occur in a variety of habits, including swiftly flowing montane streams, splash zones of waterfalls, seeps, rivers of varying sizes, and even still waters. Some larvae are detritus feeders, while other groups specialize on the intracellular contents of filamentous green algae.

Subfamily HYDROPTILINAE Stephens, 1836

Hydroptilidae Stephens, 1836: 151 [type genus: *Hydroptila* Dalman, 1819]. —Marshall 1979b: 161 [reviewed as tribe Hydroptilini]. —Wells 1987: 133 [biogeography of *Oxyethira* group].

Hydroptilinae consists of 26 genera occurring in all biogeographic regions of the world, excluding the polar regions. As Marshall (1979b) noted, the subfamily may seem to be very heterogenous and varied in morphological features of both the adults and larvae, but can be united by a number of basic similarities, including features of the adult thorax and male genitalia and the larval association with filamentous green algae. Marshall (1979b) further divided the subfamily into three subgroups based on characteristics of the male and female genitalia and general larval appearances and habitats. The *Agraylea* group, including the genera *Agraylea*, *Allotrichia*, *Dhatrichia*, *Microptila*, and *Ugandatrichia*, is based on the larger and more generalized appearance of the adults in comparison to other hydroptilids and the distinctive male genitalia. The *Hydroptila* group, essentially the genus *Hydroptila*, is also united by the distinct form of the male genitalia and can be separated from other groups and genera by the postoccipital scent caps of the males and the absence of ocelli. The *Oxyethira* group, including *Oxyethira*, *Paroxyethira*, *Tricholeiochiton*, and *Xuthotrichia*, exhibits more variety than the others in features of the adults and the genitalic form, but is united by similarities in the larvae. Larval stages are unknown for the genera *Aenigmatrichia*, *Austratrichia*, *Cyclopsiella*, *Jabitrchia*, *Kholaptila*, *Maeyaptila*, *Missitrichia*, *Mulgravia*, *Paucicalcaria*, *Sutheptila*, *Tangatrichia*, *Vietrichia*, *Wlitrchia*, and *Xuthotrichia*.

Genus *Acanthotrichia* Wells, 1982

Acanthotrichia Wells, 1982: 267 [type species: *Acanthotrichia bilamina* Wells, 1982, original designation]. —Wells 1985b: 15 [larva; pupa; case].

Acanthotrichia is a monotypic genus occurring in Australia. Based on features of the male genitalia, it was placed in Hydroptilinae and may be most closely related to the genera *Tricholeiochiton* and *Paroxyethira* (Wells 1982). The larval stage was described by Wells (1985b).

bilamina Wells, 1982: 269 [type locality: Victoria, Genoa River, near Wangarabell; NMV; ♂]. —Wells 1985b: 16 [larva, case]. —Neboiss 1986: 73 [atlas; ♂].

Distribution. —Australia.

Genus *Acritoptila* Wells, 1982

Acritoptila Wells, 1982: 262 [type species: *Acritoptila globosa* Wells, 1982, original designation]. Wells 1985b: 15 [larva; pupa; case]. —Wells 1997: 1 [checklists; larvae; species]. —Wells and Johanson 2014: 1 [generic review of New Caledonian species; key to New Caledonian species].

Acritoptila consists of 16 species occurring in Australia and New Caledonia. It can be distinguished from members of *Austratrichia* and *Mulgravia* by differences in the inferior appendages of the male genitalia (Wells 1982). Wells (1985b) described the larvae of *A. globosa* and *A. margaretae* and stated that the larvae of *Acritoptila* are indistinguishable from those of *Hellyethira*.

amphapsis Kelley, 1989: 191 [type locality: New Caledonia, Honailu River; BPBM; ♂]. —Wells 1995: 238 [case; distribution]. —Wells and Johanson 2014: 14 [♂; distribution]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

capistra Wells, 1990c: 117 [type locality: [Australia] NE Queensland, Yuccabine Creek; NMV; ♂].

Distribution. —Australia.

chiasma Kelley, 1989: 192 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells and Johanson 2014: 9 [♂; ♀; distribution]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

crinita Kelley, 1989: 193 [type locality: New Caledonia, headwaters of Honailu River; BPBM; ♂]. —Wells 1995: 238 [distribution]. —Wells and Johanson 2014: 7 [♂; ♀; distribution]. —Johanson and Wells 2019: 92 [checklist]. —*karika* Oláh & Johanson, 2010a: 7 [type locality: New Caledonia, Province Nord, 50 m upstream bridge on Hienghene-Tnédo road, 3.9 km S summit of Mt Tnéda, 2.2 km E Tnédo, 20°43.085'S 164°49.928'E, 29 m; ♂]. —Wells and Johanson 2014: 7 [♂; ♀; distribution; to synonymy].

Distribution. —New Caledonia.

csavar Oláh & Johanson, 2010a: 6 [type locality: New Caledonia, d'Amieau Fauna Reserve; MNHN; ♂]. —Wells and Johanson 2014: 11 [♂; distribution]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

disjuncta Kelley, 1989: 193 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells 1995: 235 [case; distribution]. —Oláh and Johanson 2010a: 7 [distribution]. —Wells and Johanson 2014: 4 [♂; ♀; distribution]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

forficata Wells & Johanson, 2014: 13 [type locality: New Caledonia, Province Sud, Monts des Koghis, ca 800 m S Koghi Restaurant, 22.18406°S 166.50383°E, 420 m; MNHN; ♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

globosa Wells, 1982: 265 [type locality: Western Australia, Harvey River, near Harvey Falls, 15 km E. of Harvey; NMV; ♂; ♀]. —Wells 1985b: 15 [larva, case]. —Neboiss 1986: 69 [atlas; ♂; ♀].

Distribution. —Australia.

glossocercus Kelley, 1989: 193 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells and Johanson 2014: 11 [♂; distribution]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

hamatus Wells, 1982: 265 [type locality: Queensland, Mothar Mountain, 12 km SE. of Gympie; NMV; ♂]. —Neboiss 1986: 69 [atlas; ♂].

Distribution. —Australia.

macrospina Wells & Johanson, 2014: 19 [type locality: New Caledonia, Province Nord, Wemwâdiu stream, 850 m E summit Kögi Mtn, 5 m upstream road, about 200 m S Tiwaka River, 20°49.020'S 165°14.165'E, 24 m; MNHN; ♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

margaretae Wells, 1982: 265 [type locality: Western Australia, Harvey River below Harvey Falls; NMV; ♂; ♀]. —Wells 1985b: 15 [case]. —Neboiss 1986: 69 [atlas; ♂; ♀].

Distribution. —Australia.

ouenghica Wells, 1995: 235 [type locality: [New Caledonia], Ouenghi River, nr Boulouparis; ANIC; ♂]. —Wells and Johanson 2014: 17 [♂; distribution]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

parallela Wells & Johanson, 2014: 13 [type locality: New Caledonia, Province Nord, Mt Panié, stream at camp, 20.58139°S 164.76444°E, 1310 m; MNHN; ♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

pearsoni Wells, 1990c: 115 [type locality: [Australia] NE Queensland, Yuccabine Creek; NMV; ♂].

Distribution. —Australia.

planichela Kelley, 1989: 194 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells and Johanson 2014: 15 [♂; distribution]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

Genus *Aenigmatrichia* Wells & de Moor, 2020

Aenigmatrichia Wells & de Moor, 2020: 503 [type species: *Aenigmatrichia asymmetrica* Wells & de Moor, 2020, original designation].

Aenigmatrichia is a monotypic genus occurring in Angola. Based on a combination of features shared with the Tanzanian genus *Tangatrachia*, Wells and de Moor placed *Aenigmatrichia* in the subfamily Hydroptilinae, and also noted similarities with the genera *Oxyethira*, *Pseudoxxyethira*, and *Catoxyethira*.

asymmetrica Wells & de Moor, 2020: 505 [type locality: Angola, Moxico Province, Collecting event 3 — Lungue Bungo River, along marshy river banks with swift

flowing river containing trailing and marginal aquatic vegetation, light trap downstream of road-bridge, -12.58391, 18.66511; AGMS; ♂; ♀].

Distribution. —Angola.

Genus *Agraylea* Curtis, 1834

Agraylea Curtis, 1834: 217 [type species: *Agraylea sexmaculata* Curtis, 1834, subsequent designation by Westwood 1840]. —Hagen 1864b: 115 [comments on larvae and case]. —McLachlan 1880: 505 [revision]. —Mosely 1939b: 253 [key to the British species]. —Solem 1972: 79 [key to full-grown larvae]. —Marshall 1979b: 193 [generic review]. —Blickle 1979: 6 [key to species of America north of Mexico]. —Kachalova in Medvedev 1998: 182 [key to the species of the European part of the USSR].

Agraules Agassiz, 1846: 32 [Unjustified emendation of *Agraylea* according to Fischer 1961].

Hydrorchestia Kolenati, 1848: 103 [type species: *Agraylea sexmaculata* Curtis, 1834, subsequent designation by Kimmins 1950]. —Kimmins 1950: 58 [to synonymy].

† *Nanoagraylea* Botosaneanu, 1995b: 2 [fossil subgenus of *Agraylea*].

The genus *Agraylea* currently contains two subgenera. The subgenus *Agraylea* consists of eleven species, including three fossil species known from Baltic amber, and has a Holarctic distribution. The subgenus *Nanoagraylea* consists of three fossil species (Botosaneanu 1995b). According to Marshall (1979b), the extant members of the genus are most similar morphologically to *Allotrichia*, from which they differ in hindwing venation, but features of the male genitalia are similar to those of the genera *Dhatrichia* and *Ugandatrichia*. Larval descriptions of *A. cognatella*, *A. multipunctata*, and *A. sexmaculata* were given by Solem (1972), Nielsen (1948), and Barnard (1971), respectively.

costello (*Agraylea*) Ross, 1941b: 15 [type locality: [Canada], Costello Lake, Algonquin Park, Ontario, Ontario Fisheries Research Laboratory, Cage number 4; INHS; ♂]. —Ross 1944: 122 [♂]. —Roy and Harper 1975: 1083 [distribution]. —Roy and Harper 1979: 150 [checklist]. —Blickle 1979: 47, 57 [checklist; ♂]. —Parker and Voshell 1981: 4 [distribution]. —Etnier 2010: 485 [distribution]. —Myers et al. 2011: 105 [distribution].

Distribution. —Canada, U.S.A.

† **cretaria** (*Nanoagraylea*) Botosaneanu, 1995b: 2 [type locality: [United States], Sayreville, Middlesex Co., New Jersey; AMNH; ♀; in amber; ♂]. —Wichard and Lüer 2003: 132 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Wichard 2013: 39 [species review]. —Ivanov and Melnitsky 2017: 131 [checklist].

Distribution. —New Jersey amber.

† **cumsacculo** (*Agraylea*) Wichard, 2013: 40 [type locality: [Baltic region]; ZMHB; ♂; in amber].

Distribution. —Baltic amber.

dactylina (*Agraylea*) Zhou, Yang, & Morse, 2016: 204 [type locality: China, Si-chuan Province, Kang-ding County, unnamed waterfall, tributary of Da-du River, 100 m upstream of G13 18 at 2824.9 km stone marker, N30.0665°, E102.1178°, 1675 m; NAUJ; ♂].

Distribution. —China.

drosima (*Agraylea*) Navás, 1917a: 67 [type locality: [Spain], Zaragoza; depository not designated; ♂; as *Agraylia*]. —Malicky 2005b: 546 [checklist].

Distribution. —Spain.

† ***glaesaria*** (*Agraylea*) Wichard, 2013: 38 [type locality: [Baltic region]; ZMHB; ♂; in amber].

Distribution. —Baltic amber.

insularis (*Agraylea*) (Hagen, 1865a): 219 [type locality: locality not given; depository not designated; ♂; in *Hydrorchestria*]. —Eaton 1873: 148 [to *Agraylea*]. —McLachlan 1880: 508 [revision]. —Nybom 1948: 4 [distribution]. —Malicky 2005b: 546 [checklist].

Distribution. —Portugal.

† ***lentiginosa*** (*Nanoagraylea*) Botosaneanu, Johnson, & Dillon, 1998: 222 [type locality: United States, New Jersey; ANSP; ♂; in amber]. —Wichard and Lürer 2003: 132 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Ivanov and Melnitsky 2017: 131 [checklist].

Distribution. —New Jersey amber.

multipunctata (*Agraylea*) Curtis, 1834: 217 [type locality: “Britain”; type not designated]. —McLachlan 1865: 92 [♂]. —Eaton 1873: 147 [♂]. —McLachlan 1880: 506 [revision; ♂]. —Morton 1886: 269 [notes on larva and case]. —Morton 1899b: 281 [distribution]. —Morton 1904: 323 [distribution]. —Morton 1905: 74 [♂; distribution]. —Banks 1907a: 49 [catalogue]. —Martynov 1924: 40 [♂]. —Sibley 1926: 204 [biology]. —Betten 1934: 147 [larva; ♂; distribution]. —Martynov 1934: 114 [♂]. —Mosely 1939b: 253 [♂]. —Tjeder 1940: 10 [distribution]. —Kimmins 1943: 154 [distribution]. —Ross 1944: 122 [♂; ♀; distribution]. —Denning 1947b: 170 [distribution]. —Nielsen 1948: 41 [larva]. —Berg 1948: table 14, between pages 124–125 [distribution]. —Ross and Spencer 1952: 46 [distribution]. —Morse and Blickle 1953: 72 [checklist]. —Nybom 1960: 17 [checklist]. —Fischer 1961: 87 [cited as senior synonym]. —Spuris 1962: 57, 61, 70 [distribution]. —Neboiss 1963: 613 [distinct from *A. sexmaculata*]. —Spuris 1964: 12 [distribution]. —Etnier 1965: 146 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Spuris 1972: 19, 21, 23, 27, 30 [checklist]. —Obr 1975: 128 [distribution]. —Watts 1976: 15 [pupa]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Etnier and Schuster 1979: 17 [distribution]. —Roy and Harper 1979: 150 [checklist]. —Blickle 1979: 47, 57 [checklist; ♂]. —Swegman et al. 1981: 132 [distribution]. —Waltz and McCafferty 1983a: 9 [distribution]. —Malicky 1983b: 53, 57 [atlas; ♂; ♀]. —Huryn and Foote 1983: 790 [distribution]. —Steven and Hilsenhoff 1984: 163 [distribution]. —Lake 1984: 219 [distribution]. —Kumanski 1985: 114 [♂]. —Wiberg-Larsen 1985: 40

[checklist]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Botosaneanu and Levanidova 1988: 173 [distribution; comparison with *A. cognatella*]. —Harper 1989: 541 [distribution]. —Spuris 1989: 15 [checklist]. —Stroot 1989: 157 [larval coloration patterns]. —Wrubleski and Ross 1989: 163 [ecology]. —Stroot 1989: 157 [larval coloration]. —Masteller and Flint 1992: 69 [checklist]. —Ross and Murkin 1993: 27 [ecology]. —Masteller 1993: 134 [distribution]. —Andersen et al. 1993b: 3 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Czachorowski and Prishchepchik 1998: 11 [distribution]. —Uherkovich and Nógrádi 1999: 421 [distribution]. —Wiberg-Larsen and Karsholt 1999: 126 [distribution]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Morse et al. 2001: 102 [distribution]. —Gullefors 2002: 138 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Gullefors 2003: 195 [distribution]. —Mey 2003a: 40 [head]. —Malicky 2004a: 66, 73 [atlas]. —Graf and Hutter 2004: 147 [distribution]. —Gullefors 2005a: 118, 119 [distribution]. —Gullefors 2005b: 138 [distribution]. —Hohmann 2005: 106 [checklist]. —Berlin 2005: 128 [distribution]. —Mey 2005b: 119 [distribution]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Zack et al. 2006: 134 [phenology; distribution]. —Morse et al. 2006: 320 [distribution]. —Gullefors 2006: 136, 137 [distribution]. —Chvojka and Komzák 2006: 358 [distribution]. —Robert 2007: 82 [checklist]. —Berlin and Thiele 2007: 49 [checklist]. —Ivanov and Melnitsky 2007: 32 [distribution]. —Gullefors and Johanson 2007: 64 [distribution]. —Višinskienė 2009: 27 [checklist]. —Szczyński and Godunko 2008: 14 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 113 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Vieira et al. 2009: 257 [distribution]. —Houghton and Holzenthal 2010: 486 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Djaernes 2011: 19 [sternum V glands]. —Djaernes and Sperling 2011: 86 [sternum V glands]. —Myers et al. 2011: 105 [distribution]. —Ivanov 2011: 194 [checklist]. —Waringer and Graf 2011: 282 [larval synopsis]. —Houghton et al. 2011b: 5 [phenology; habitat]. —Armitage et al. 2011: 13 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Zuyderduyn and Tempelman 2013: 25 [distribution]. —O'Connor 2013: 63 [distribution]. —Tempelman and Sanabria 2013a: 20 [distribution]. —Blinn and Ruiter 2013: 280, 290 [biology; distribution]. —Wright et al. 2013: 466 [biology; distribution]. —Tempelman and Sanabria 2013b: 144 [distribution]. —O'Connor and O'Connor 2014: 272 [distribution]. —Chalkley 2014: 13 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —O'Connor 2015: 28, 71 [distribution]. —O'Connor and O'Connor 2015: 203 [distribution]. —Stojanović et al. 2015: 55 [distribution]. —DeWalt et al. 2016: 51 [distribution]. —Vshivkova et al. 2016: 79 [distribution]. —O'Connor and O'Connor 2016: 165 [distribution]. —Chuluunbat et al. 2016: 101 [distribution]. —Potikha and Vshivkova 2016: 363 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Smirnova et al. 2016: 401

- [distribution]. —Buczyńska et al. 2016: 161 [distribution]. —Houghton 2016: 45 [biology]. —Gullefors 2016: 155 [checklist]. —Melnitsky and Ivanov 2017: 19 [distribution]. —Houghton et al. 2017: 62 [checklist]. —O'Connor and O'Connor 2018: 80 [distribution]. —O'Connor et al. 2018: 23 [distribution]. —Gullefors 2018: 108 [biology; distribution]. —Lock and van Butsel 2018: 3 [distribution]. —Mendez et al. 2019: 128 [checklist]. —Edmonds-Brown 2020: 91 [checklist]. —Houghton and Lardner 2020: 42 [distribution]. —O'Connor 2020: 140 [distribution].
- argyricola* (Kolenati, 1848): 104 [type locality: [Sweden], Suecia meridionali ad Holmiam, in Dalecarlia; probably NHMW; probably ♂; in *Hydrorchrestia*]. —Eaton 1873: 147 [treated as possibly distinct species; to *Agraylea*]. —McLachlan 1880: 508 [revision]. —Malicky 2005b: 546 [as synonym].
- cognatella* McLachlan, 1880: 507 [type locality: Finland; depository not designated; ♂]. —Siltala 1908: 14 [distribution]. —Martynov 1924: 40 [♂]. —Martynov 1934: 121 [♂]. —Nybom 1960: 17 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Solem 1970a: 2 [distribution]. —Solem 1972: 77 [larva]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Lillehammer 1978: 256 [distribution]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Botosaneanu and Levanidova 1988: 173 [distribution; comparison with *A. multipunctata*]. —Spuris 1989: 15 [checklist]. —Andersen et al. 1993a: 51 [distribution]. —Andersen et al. 1993b: 2 [distribution]. —Wiggins and Parker 1997: 794 [distribution]. —Zasykina and Ryabukhin 2001: 45 [checklist]. —Gullefors 2002: 138 [checklist]. —Malicky 2005b: 546 [to synonymy]. —Ivanov 2011: 194 [checklist]. —Andersen and Hagenlund 2012: 135 [distribution]. —Kendrick and Huryn 2014: 280 [distribution]. —Zasykina 2016: 486 [distribution]. —Gullefors 2016: 155 [checklist].
- flavida* (Banks, 1907b): 164 [type locality: [United States], Ft. Collins, Colorado; MCZ; ♂; in *Allotrichia*]. —Ross 1938b: 8 [lectotype designated]. —Ross 1944: 295 [to synonymy].
- fraterna* Banks, 1907b: 164 [type locality: [United States], Falls Church, Va.; MCZ; ♂]. —Milne 1936: 77 [as synonym]. —Ross 1939b: 8 [lectotype designated; to synonymy].
- multiguttata* Uljanin, 1869: 37, 100 [type locality: Russia; no depository designated, no type specimen designated]. —Fischer 1961: 92 [treated as a synonym].
- signata* (Banks, 1904a): 215 [type locality: [United States], Virginia, Falls Church; Collection Banks; ♂; in *Allotrichia*]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 149 [checklist]. —Milne 1936: 77 [to synonymy].
- Distribution.** —Austria, Belarus, Canada, Czech Republic, Denmark, England, Estonia, Finland, Germany, Hungary, Iran, Ireland, Italy, Kazakhstan, Latvia, Luxembourg, Mongolia, Netherlands, Norway, Poland, Serbia, Romania, Russia, Scotland, Sweden, Ukraine, U.S.A.
- † *parva* (*Nanoagraylea*) Wichard & Bölling, 2000: 346 [type locality: [United States], New Jersey, Middlesex Co., Sayreville, White Oaks Pit; AMNH; ♂; in amber]. —Wichard and Lürer 2003: 132 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Ivanov and Melnitsky 2017: 131 [checklist].
- Distribution.** —New Jersey amber.

saltesea (*Agraylea*) Ross, 1938a: 114 [type locality: [United States], Montana, Saltese; INHS; ♂]. —Blickle 1979: 47, 57 [checklist; ♂]. —Vineyard 1982: 73 [distribution]. —Ruiter 1999: 165 [distribution]. —Blinn and Ruiter 2013: 290 [biology; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

sexmaculata (*Agraylea*) Curtis, 1834: 217 [type locality: “Britain”, Sept. Lisson Grove (according to Neboiss 1963: 619, “most likely a street near Marylebone Station, London and the northern end of it crosses the Grand Union Canal”); NMV; ♂]. —Kolenati 1848: [revision; distribution; as *Hydrochorestia*]. —Eaton 1873: 147 [treated as synonym of *A. multipunctata*]. —Neboiss 1963: 619 [designation of lectoholotype [sic]; treated as species distinct from *A. multipunctata*]. —Botosaneanu 1967: 294 [distribution]. —Barnard 1971: 253 [larva]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 15 [♂; distribution]. —Moretti et al. 1981: 350, 354 [biology; distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Moretti et al. 1981: 239 [ecology; distribution]. —Bagge 1982: 78 [distribution]. —Andrikovics and Ujhelyi 1983: 6 [distribution]. —Malicky 1983b: 53, 57 [atlas; ♂; ♀]. —González and Otero 1983: 118 [distribution]. —Wiberg-Larsen 1985: 40 [checklist]. —Kumanski 1985: 113 [♂]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Sipahiler and Malicky 1987: 106, 107 [distribution]. —O’Connor and O’Hanrahan 1988: 478 [distribution]. —Spuris 1989: 15 [checklist]. —Usseglio-Polatera and Bournau 1989: 254 [distribution]. —Andersen et al. 1990: 52 [distribution]. —González et al. 1990: 212 [checklist]. —Andersen et al. 1993b: 3 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Nógrádi and Uherkovich 1998: 339 [distribution]. —Czachorowski and Prishchepchik 1998: 11 [distribution]. —Cianficconi et al. 1999a: 57 [distribution]. —Wiberg-Larsen and Karsholt 1999: 126 [distribution]. —Malicky 1999c: 96 [distribution]. —Uherkovich and Nógrádi 1999: 421 [distribution]. —Uherkovich and Nógrádi 2001: 95 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Valle 2001: 67 [distribution]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Gullefors 2002: 138 [checklist]. —Cibaitè 2003a: 10 [checklist]. —Sipahiler 2003b: 33 [distribution]. —Gullefors 2003: 194 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 66, 73 [atlas]. —Berlin 2005: 128 [distribution]. —Mey 2005b: 119 [distribution]. —Malicky 2005b: 546 [checklist]. —Malicky 2005a: 57 [distribution]. —Sipahiler 2005: 396 [distribution]. —Gullefors 2005a: 118 [distribution]. —Gullefors 2005b: 138 [distribution]. —Hohmann 2005: 106 [checklist]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Sweeney 2006: 300 [distribution]. —Chvojka and Komzák 2006: 358 [distribution]. —Kiss et al. 2006: 139 [biology]. —Ruiz-García et al. 2006: 77 [distribution]. —Waringer and Graf 2006: 356 [distribution]. —Schiess-Bühler and Rezbanyai-Reser 2006: 73 [distribution]. —Robert 2007: 82

- [checklist]. —Berlin and Thiele 2007: 49 [checklist]. —Cianficconi et al. 2007b: 576 [distribution]. —Schrinkel et al. 2008: 90 [checklist]. —Waringer and Graf 2008: 142 [distribution]. —Ujvárosi et al. 2008: 113 [checklist]. —Szczęsny and Godunko 2008: 14 [checklist]. —González and Menéndez 2008: 188 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Višinskienė 2009: 27 [checklist]. —Oláh 2010: 91 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Ivanov 2011: 195 [checklist]. —Waringer and Graf 2011: 282 [larval synopsis]. —Cianficconi et al. 2011: 47 [distribution]. —Valladolid et al. 2011: 501 [distribution]. —Gombeer et al. 2011a: 362 [distribution]. —Gombeer et al. 2011b: 112 [distribution]. —Nowinszky et al. 2011: 231 [biology]. —Viidalepp et al. 2011: 196 [distribution]. —Kiss 2012: 28 [distribution]. —Komzák and Chvojka 2012: 718 [distribution]. —Zuyderduyn and Tempelman 2013: 25 [distribution]. —Tempelman and Sanabria 2013a: 20 [distribution]. —Tempelman et al. 2013: 288 [distribution]. —Mey 2014: 187 [distribution]. —Chalkley 2014: 13 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —Chalkley 2015: 44 [distribution]. —O'Connor 2015: 28, 74 [distribution]. —Stanić-Kroštrovan et al. 2015: 85 [distribution]. —Pan'kov and Krasheninnikov 2016: 333 [distribution]. —O'Connor and O'Connor 2016: 165 [distribution]. —Oláh and Beshkov 2016: 100 [distribution]. —Smirnova et al. 2016: 401 [distribution]. —Buczyńska et al. 2016: 161 [distribution]. —Martín et al. 2016: 262 [distribution]. —Gullefors 2016: 155 [checklist]. —Ruiz-García et al. 2016: 4 [distribution]. —Sipahiler 2017b: 12 [distribution]. —Melnitsky and Ivanov 2017: 19 [distribution]. —O'Connor and O'Connor 2017a: 243 [distribution]. —O'Connor and O'Connor 2017b: 52 [distribution]. —O'Connor and O'Connor 2018: 81 [distribution]. —O'Connor et al. 2018: 23 [distribution]. —Edmonds-Brown 2020: 91 [checklist].
- flabellifera* (Bremi) in Hagen 1864b: 116 [type locality not given; type not designated; in *Hydroptila*]. —Lauterborn 1934: 220 [specimens re-identified as *A. pallidula* and *Tricholeiochiton fagesii*].
- pallidula* McLachlan, 1875: 46 [type locality: [Russia]; type not designated]. —McLachlan 1880: 507 [♂; distribution]. —McLachlan 1884: 70 [distribution]. —Morton 1904: 324 [distribution]. —Martynov 1924: 39 [♂]. —Martynov 1927: 176 [distribution]. —Martynov 1934: 118 [♂]. —Mosely 1939b: 255 [♂]. —Tjeder 1940: 10 [distribution]. —Kimmins 1943: 154 [distribution]. —Berg 1948: table 14, between pages 124–125 [distribution]. —Jacquemart 1958: 1 [larva]. —Schmid 1959b: 686 [distribution]. —Nybom 1960: 17 [checklist]. —Spuris 1962: 61 [distribution]. —Neboiss 1963: 619 [to synonymy]. —Botosaneanu 1967: 294 [as synonym]. —Spuris 1972: 27, 28 [checklist].
- Distribution.** —Austria, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Kazakhstan, Latvia, Luxembourg, Macedonia, Netherlands, Norway, Poland, Portugal, Slovenia, Romania, Russia, Spain, Sweden, Switzerland, Turkey, Ukraine.

† *spathifera* (*Agraylea*) Ulmer, 1912a: 39 [type locality: [Baltic region]; holotype missing, originally deposited in “Museum Königsberg” (no. 11883); ♂; in amber]. —Eskov et al. 2008: 78 [checklist]. —Wichard 2013: 37 [species review].

Distribution. —Baltic amber.

taymyrensis (*Agraylea*) Mey, 2003a: 39 [type locality: Russia, Northern Siberia, Norilsk, 40 km östlich, Pyany Insel; ZMHB; ♂]. —Ivanov 2011: 195 [checklist].

Distribution. —Russia.

Genus *Allotrichia* McLachlan, 1880

Allotrichia McLachlan, 1880: 508 [type species: *Agraylea pallicornis* Eaton, 1873, monotypic]. —Marshall 1979: 196 [generic review]. —Botosaneanu 1992: 51 [key to species in the Levant; as subgenus of *Agraylea*]. —Kachalova in Medvedev 1998: 182 [key to the species of the European part of the USSR]. —Malicky 2005b: 545 [treated as genus]. —Ivanov 2011: 183 [referred to as distinct genus].

Allotrichia consists of 14 species, including four fossil species known from Baltic amber. The genus has a Palearctic distribution. Marshall (1979b) noted that the genus is morphologically very similar to *Agraylea*, and that *Agraylea* may be a junior subjective synonym of *Allotrichia*. The larvae of *A. pallicornis* were described by Giudicelli and Vaillant (1967).

† *ampullata* Ulmer, 1912a: 40 [type locality: [Baltic region]; holotype missing, originally deposited in “Museum Königsberg” (no. 14038); ♂; in amber]. —Eskov et al. 2008: 78 [checklist]. —Wichard 2013: 45 [species review].

Distribution. —Baltic amber.

† *clara* Wichard, 2013: 46 [type locality: [Baltic region]; ZMHB; ♂; in amber].

Distribution. —Baltic amber.

galaica González & Malicky, 1980: 214 [type locality: Spain, Provinz Lugo, 500 m, Fluß Moreira; USCM; ♂]. —Malicky 1983b: 56 [atlas; ♂]. —González et al. 1986: 113 [distribution]. —Malick 2004a: 67 [atlas]. —Malicky 2005b: 545 [checklist]. —Coppa and González 2007: 95 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Martín et al. 2016: 262 [distribution].

Distribution. —France, Portugal, Spain.

heterocera Navás, 1917b: 17 [type locality: [Spain], Seo de Urgel (Lérida), a orillas del Segre; depository not designated; ♀]. —Malicky 2005b: 545 [checklist; may be *nomen dubium*].

Distribution. —Spain.

laerma Malicky, 1976: 92 [type locality: Greece, Insel Rhodos, Laerma; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 56 [atlas; ♂]. —Malick 2004a: 67, 73 [atlas]. —Malicky 2005b: 545 [checklist]. —Malicky 2005a: 58 [distribution].

Distribution. —Greece.

marinkovicae Malicky, 1977: 65 [type locality: Herzegovina, Mostar; NHMW; ♂]. —Malicky 2004a: 67, 73 [atlas]. —Malicky 1983b: 56 [atlas; ♂]. —Malicky 2005b: 545 [checklist]. —Malicky 2005a: 58 [distribution]. —Karaouzas and Malicky 2015: 4 [distribution]. —Stanić-Koštroman et al. 2015: 85 [distribution]. —Oláh 2017: 136 [distribution].

Distribution. —Bosnia-Herzegovina, Greece, Serbia.

militsa Malicky, 1992b: 40 [type locality: Greece, Peloponnes, Methoni, 6 km westlich von Militsa; Collection Malicky; ♂]. —Malicky 2004a: 67 [atlas]. —Malicky 2005b: 545 [checklist]. —Malicky 2005a: 58 [distribution].

Distribution. —Greece.

pallicornis (Eaton, 1873): 148 [type locality: [Italy], Turin (Chiliani); NHMUK; ♂; in *Agraylea*]. —McLachlan 1880: 509 [revision; ♂; ♀; to *Allotrichia*]. —McLachlan 1884: 70 [distribution]. —Morton 1896: 102 [distribution]. —Morton 1904: 324 [distribution]. —Mosely 1930a: 183 [checklist]. —Racięcka 1936: 98 [distribution]. —Mosely 1939b: 256 [♂]. —Kimmins 1957a: 107 [lectotype designation]. —Schmid 1959b: 685 [distribution]. —Jacquemart 1960: 1 [♂; distribution]. —Giudicelli and Vaillant 1967: 29 [larva]. —Botosaneanu 1967: 294 [distribution]. —Malicky 1974: 122 [checklist]. —Kumanski 1979: 17 [♂; distribution]. —Moretti et al. 1981: 350, 354 [biology; distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Moretti et al. 1981: 239 [ecology; distribution]. —Malicky 1983b: 53, 56 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 115 [♂]. —González et al. 1986: 113 [distribution]. —Sipahiler and Malicky 1987: 112, 129, 143 [distribution]. —Malicky and Lounaci 1987: 15 [checklist]. —Spuris 1989: 15 [checklist]. —Usseglio-Polatera and Bournaud 1989: 254 [distribution]. —Krušnik 1991: 13 [distribution]. —Duke 1994: 7 [distribution]. —Uherkovich and Nógrádi 1999: 421 [distribution]. —Valle 2001: 68 [distribution]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Ujvárosi 2002: 384 [distribution]. —Cibaité 2003a: 10 [checklist]. —Bonada et al. 2004: 52 [distribution]. —Cianficconi et al. 2004b: 330 [distribution]. —Malicky 2004a: 67, 73 [atlas]. —Sipahiler 2005: 396 [distribution]. —Sipahiler 2005: 396 [distribution]. —Bonada et al. 2005: 787 [distribution]. —Malicky 2005b: 545 [checklist]. —Malicky 2005a: 58 [distribution]. —Coppa and Tachet 2005: 132 [distribution]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Schiess-Bühler and Rezbanyai-Reser 2006: 73 [distribution]. —Robert 2007: 82 [checklist]. —Sipahiler 2007: 38 [distribution]. —Cianficconi et al. 2007b: 569–576 [distribution]. —Dohet et al. 2008: 46 [distribution; ecology]. —Szcęsny and Godunko 2008: 14 [checklist]. —Ujvárosi et al. 2008: 113 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Višinskienė 2009: 27 [checklist]. —Hohmann 2010: 40 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Waringer and Graf 2011: 282 [larval synopsis]. —Ivanov 2011: 195 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Komzák and Chvojka 2012: 718 [distribution]. —Wolf et

al. 2012: 75 [distribution]. —Corallini et al. 2013b: 26 [distribution]. —Martín et al. 2014: 72 [distribution]. —Malicky 2014b: 8 [teratological structures]. —Karaouzas and Malicky 2015: 14 [distribution]. —Martínez et al. 2015: 40 [distribution]. —Martín et al. 2015: 75 [distribution]. —Stanić-Koštrovan et al. 2015: 85 [distribution]. —O'Connor 2015: 28 75 [distribution]. —Karaouzas and Malicky 2016: 18 [distribution]. —Martínez et al. 2016: 52 [distribution]. —Sekhi et al. 2016: 58 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —Valle and Lodovici 2018: 146 [distribution]. —Mabrouki et al. 2020: 11 [distribution]. —*tauri* Jacquemart, 1965: 5 [type locality: [Turkey] 69 km avant Gülek, St. 37; IRSNB; ♂]. —Botosaneanu and Malicky 1978: 341 [to synonymy].

Distribution. —Algeria, Austria, Belgium, Bulgaria, Czech Republic, England, Estonia, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Lithuania, Luxembourg, Morocco, Portugal, Romania, Russia, Serbia, Scotland, Slovenia, Spain, Switzerland, Turkey, Ukraine.

rhynchophyllum Zhou, Yang, & Morse, 2016: 206 [type locality: China, Hei-long-jiang Province, Yi-chun City, Wu-yi-ling, Wu-yun River in the Town of Yong-sheng, N47.54°, E128.53°, 160 m; NAUJ; ♂]. —Ito and Shimura 2019: 32 [♂; distribution].

Distribution. —China, Japan.

† ***succinica*** Ulmer, 1912a: 41 [type locality: [Baltic region]; holotype missing, originally deposited in the “Klebs collection” (no. 14038); ♂; in amber]. —Eskov et al. 2008: 78 [checklist]. —Wichard 2013: 44 [species review; as *succinea*].

Distribution. —Baltic amber.

† ***superba*** Wichard, 2013: 48 [type locality: [Baltic region]; ZMHB; ♂; in amber].

Distribution. —Baltic amber.

teldanica Botosaneanu, 1974: 164 [type locality: [Israel], Tel el Kadi (Tel Dan); TAU; ♂]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 56 [atlas; ♂]. —Botosaneanu 1992: 87 [♂; ♀]. —Sipahiler 2003b: 33 [distribution]. —Malicky 2004a: 67, 73 [atlas]. —Sipahiler 2005: 396 [distribution]. —Malicky 2005b: 545 [checklist]. —Malicky 2005a: 58 [distribution]. —Dia 2015: 51 [distribution]. —Karaouzas and Malicky 2016: 18 [distribution]. —Sipahiler 2018: 41 [distribution].

Distribution. —Greece, Israel, Lebanon, Turkey.

vilnensis orientalis Botosaneanu, 1992: 54 [type locality: [Lebanon], Nabaa Joun spring, basin of the Nahr el Aouali (one of the small coastal basins of Lebanon), 50 m]; ZMUA; ♀; ♂]. —Malicky 2005b: 545 [note on subspecies differences].

Distribution. —Iran, Lebanon.

vilnensis vilnensis Racięcka, 1937: 477 [type locality: [Lithuania], Wilno; MZVU; ♂; ♀]. —Racięcka 1936: 98 [distribution; not treated as new species]. —Schmid 1959b: 685 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Çakin 1983: 246 [distribution]. —Malicky 1983b: 56 [atlas; ♂]. —Sipahiler and Malicky 1987: 122 [distribution]. —Spuris 1989: 15 [checklist]. —Mirmoayed and Malicky 2002: 164 [checklist]. —Cibaitė 2003a: 10 [checklist]. —Malicky 2004a: 67, 73 [atlas]. —Sipahiler 2005: 396

[distribution]. —Malicky 2005b: 545 [checklist]. —Malicky 2005a: 59 [distribution]. —Višinskienė 2009: 27 [checklist]. —Ivanov 2011: 195 [checklist]. —Karaouzas and Malicky 2015: 19 [distribution]. —Dia 2015: 51 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Sipahiler 2016: 12 [distribution].

Distribution. —Greece, Iran, Lebanon, Lithuania, Russia, Turkey.

Genus *Austratrichia* Wells, 1982

Austratrichia Wells, 1982: 259 [type species: *Austratrichia nevoissi* Wells, 1982, original designation].

The monotypic genus *Austratrichia* is endemic to Australia. It is most similar to the genus *Hellyethira*. According to Wells (1982), the genus can be distinguished using characters of the male genitalia (Wells 1982). The larval stage is unknown.

nevoissi Wells, 1982: 260 [type locality: Victoria, Mitta Mitta River-Snowy Creek junction; NMV; ♂; ♀]. —Neboiss 1986: 68 [atlas; ♂; ♀].

Distribution. —Australia.

Genus *Cyclopsiella* Kjærandsen, 1997

Cyclopsiella Kjærandsen, 1997: 234 [type species: *Cyclopsiella anderseni* Kjærandsen, 1997, original designation].

The monotypic genus *Cyclopsiella*, recorded only from Ghana, can be distinguished from all other hydroptilid genera by having only a single medial ocellus and lacking postoccipital lobes (Kjærandsen 1997). Kjærandsen (1997) noted that the male genitalia of *Cyclopsiella* share some similarities with the genera *Hydroptila* and *Hellyethira*, yet, in the accompanying parsimony analysis, *Cyclopsiella* grouped with the genera *Jabitrachia*, *Oxyethira*, and *Tangatrachia*. The larval stage is unknown.

anderseni Kjærandsen, 1997: 235 [type locality: Ghana, Western Region, Ankasa Game Production Preserve, station 8; ZMUB; ♂].

Distribution. —Ghana.

Genus *Dhatrichia* Mosely, 1948

Dhatrichia Mosely, 1948b: 78 [type species: *Dhatrichia inasa* Mosely, 1948b, original designation]. —Marshall 1979b: 199 [generic review]. —Kjærandsen 2004: 131 [revision; phylogenetic analysis; species group designation; keys to males, females, fifth instar larvae, and pupae].

The genus *Dhatrichia* consists of 14 species recorded from Burkina Faso, Ghana, Madagascar, Tanzania, Yemen, and Zaire. Marshall (1979b) stated that *Dhatrichia*

shares similarities in the male genitalia with *Agraylea* and in the thorax with *Microptila*, Kjærandsen (2004), however, postulated that the genus is actually sister to either *Kumanskiella* or *Microptila*, although *Kumanskiella* is currently placed in the Neotrichiinae. The larvae of *D. ankasaensis*, *D. hunukani*, *D. lerabae*, *D. minuta*, and *D. wliensis* were described by Kjærandsen (2004).

anderseni Kjærandsen, 2004: 168 [type locality: Tanzania, Tanga Region, West Usambara Mountains, Mazumbai, Kaputu stream, loc. 10, 1420 m asl; ZMUB; ♂; ♀].

Distribution. —Tanzania.

ankasaensis Kjærandsen, 2004: 148 [type locality: Ghana, Western Region, Ankasa Game Production Reserve, site 4; ZMUB; ♂; ♀, larva, pupa].

Distribution. —Ghana.

bipunctata Statzner, 1977: 394 [type locality: Zaire, Kivu Region, Kalengo stream 10 km west of Lake Kivu; ZMHB; ♂; ♀]. —Kjærandsen 2004: 164 [♂, ♀; distribution].

Distribution. —Congo, Zaire.

botiensis Kjærandsen, 2004: 168 [type locality: Ghana, Eastern Region, Boti Waterfalls; ZMUB; ♂; ♀].

Distribution. —Ghana.

cinyra Wells & Andersen, 1995: 157 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 4, 1680 m a.s.l.; ZMUB; ♂]. —Kjærandsen 2004: 158 [♂, ♀; distribution].

Distribution. —Tanzania.

divergenta Wells & Andersen, 1995: 156 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 7, 1535 m a.s.l.; ZMUB; ♂]. —Kjærandsen 2004: 173 [♂, ♀].

Distribution. —Tanzania.

giboni Kjærandsen, 2004: 161 [type locality: Madagascar, Rianila river basin, Analamazaotra Nature Reserve, small brook near Andasibe, 18°54'37"S 48°25'14"E, 890 m asl; ZMUB; ♂].

Distribution. —Madagascar.

hunukani Kjærandsen, 2004: 150 [type locality: Ghana, Volta Region, Wli, Agumatsa Waterfalls, site 5; ZMUB; ♂; ♀, larva, pupa].

Distribution. —Ghana.

inasa Mosely, 1948b: 78 [type locality: Yemen, Wadi Dhahr, north-west of San'a, c. 7900 ft; NHMUK; ♂]. —Botosaneanu 1973: 66 [taxonomic note]. —Malicky 1983b: 57 [atlas; ♂]. —Kjærandsen 2004: 165 [♂]. —Kjærandsen 2004: 165 [♂]. —Malicky 2004a: 66 [atlas]. —Malicky 2005b: 547 [checklist].

Distribution. —Yemen.

lerabae (Gibon, Guenda, & Coulibaly, 1994): 109 [type locality: sur la haute Léraba (bassin de la Comoé, région de Banfora, Burkina Faso); MNHN; ♂; in *Ugandatrichia*]. —Kjærandsen and Andersen 1997: 244 [distribution]. —Kjærandsen 2004: 145 [♂, ♀, larva, pupa; distribution, to *Dhatrichia*].

Distribution. —Burkina Faso, Ghana.

madagascarensis Kjærandsen, 2004: 159 [type locality: Madagascar, Efaho River basin, River Ambahibe near Ezoambo Village, 24°49'10"S 46°51'59"E, 25 m asl; ZMUB; ♂; ♀].

Distribution. —Madagascar.

minuta Kjærandsen, 2004: 167 [type locality: Ghana, Western Region, Ankasa Game Production Reserve, site 4; ZMUB; ♂; ♀, larva, pupa].

Distribution. —Ghana.

paraminuta Kjærandsen, 2004: 165 [type locality: Ghana, Volta Region, Wli, Agumatsa Waterfalls, site 1; ZMUB; ♂; ♀].

Distribution. —Ghana.

wliensis Kjærandsen, 2004: 152 [type locality: Ghana, Volta Region, Wli, Agumatsa Waterfalls, site 5(C); ZMUB; ♂; ♀, larva, pupa].

Distribution. —Ghana.

Genus *Hellyethira* Neboiss, 1977

Hellyethira Neboiss, 1977: 42 [type species: *Hellyethira valleculea* Neboiss, 1977, original designation]. —Wells 1979b: 312 [revision, key to males]. —Wells 1985b: 10 [key to cased larvae]. —Wells 1991: 494 [key to males of New Guinea]. —Wells 1997: 1 [checklist; key to larvae of Australian species].

The genus *Hellyethira* consists of 44 species, 30 occurring in Australia (one of which is also found in New Caledonia), others in New Guinea and Southeast Asia, and a single species described from Ethiopia. It can be distinguished from the genera *Paroxyethira* and *Orthotrichia* by differences in wing venation (Neboiss 1977). Wells (1985b) stated that the larvae of the genus are indistinguishable from those of *Acritoptila*; she described the larval stages of *H. simplex* and final instar larvae of many others in the genus.

agosana Mey, 2003b: 433 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂]. —Malicky and Chantaramongkol 2007: 1028 [distribution]. —Malicky 2009b: 10 [distribution].

Distribution. —Philippines.

allynensis Wells, 1979b: 316 [type locality: [Australia] New South Wales, Upper Allyn River; ANIC; ♂]. —Wells 1985b: 11 [case]. —Neboiss 1986: 78 [atlas; ♂].

Distribution. —Australia.

amutiel Malicky, Melnitsky, & Ivanov, 2014a: 833 [type locality: [Indonesia] Papua, Insel Biak, Warsa, Wafarak Wasserfall, 0°47'39"S 135°55'31"E, 50 m; ZIN; ♂].

Distribution. —Indonesia.

babuyana Wells & Mey, 2002: 131 [type locality: [Philippines] Palawan, Cayasan, Babuyan River, LF; ZMHB; ♂]. —Mey and Freitag 2020: 57 [distribution].

Distribution. —Philippines.

basilobata Wells, 1979b: 316 [type locality: [Australia] Victoria, Yarra River, below Upper Yarra Dam; NMV; ♂]. —Wells 1985b: 10 [larva, case]. —Neboiss 1986: 76 [atlas; ♂]. —Neboiss 2002: 53 [checklist]. —Oláh and Johanson 2010a: 8 [distribution].

Distribution. —Australia.

bulat Wells & Huisman, 1992: 110 [type locality: East Malaysia, Sabah, Long Pa Sia, Sg. Ritan-Rurun, 1040 m; RMNH; ♂; ♀]. —Malicky and Chantaramongkol 2007: 1028 [distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010b: 26 [distribution]. —Malicky 2010a: 40 [atlas; ♂]. —Malicky et al. 2018: 1322, 1323 [distribution]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Brunei, Indonesia, Malaysia, Thailand.

cornuta Wells, 1979b: 325 [type locality: [Australia] Queensland, Little Mulgrave River; ANIC; ♂]. —Wells 1985b: 13 [larva, case]. —Neboiss 1986: 78 [atlas; ♂; ♀]. —Oláh and Johanson 2010a: 10 [distribution].

Distribution. —Australia.

cubitans Wells, 1979b: 317 [type locality: [Australia] Queensland, Palmer River; ANIC; ♂; ♀]. —Wells 1985b: 11 [case]. —Neboiss 1986: 76 [atlas; ♂]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

davidi Wells, 2005: 388 [type locality: Australia, N Queensland, 11°42.9'S 142°20.0'E, Gunshot Creek, Telegraph Crossing; QM; ♂].

Distribution. —Australia.

dentata Wells, 1979a: 319 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek; WAM; ♂]. —Neboiss 1986: 78 [atlas; ♂].

Distribution. —Australia.

digitata Wells, 2005: 387 [type locality: Australia, N Queensland, 11°42.9'S 142°20.0'E, Gunshot Creek, Telegraph Crossing; QM; ♂].

Distribution. —Australia.

eskensis (Mosely, 1934a): 141 [type locality: [Australia] Esk, Queensland; Collection Tillyard (transferred to NHMUK); ♂; in *Xuthotrichia*]. —Mosely and Kimmins 1953: 526 [♂]. —Wells 1979b: 321 [♂, ♀, to *Hellyethira*]. —Wells 1985b: 12 [larva, case]. —Neboiss 1986: 79 [atlas; ♂; ♀]. —Wells 1991: 495 [distribution].

Distribution. —Australia, Papua New Guinea.

exserta Wells, 1979a: 319 [type locality: [Australia] New South Wales, Boonoo Boonoo River; NMV; ♂; ♀]. —Wells 1985b: 11 [larva, case, biology]. —Neboiss 1986: 77 [atlas; ♂; ♀]. —Neboiss 2002: 53 [checklist]. —Oláh and Johanson 2010a: 10 [distribution].

Distribution. —Australia.

fimbriata (Mosely, 1934a): 142 [type locality: [Australia] Heathcote, New South Wales; Collection Tillyard (transferred to NHMUK according to Mosely and Kimmins 1953: 525); ♂; in *Xuthotrichia*]. —Mosely and Kimmins 1953: 523 [♂]. —Wells 1979b: 320 [to *Hellyethira*]. —Neboiss 1986: 78 [atlas; ♂].

Distribution. —Australia.

forficata Wells, 1990c: 111 [type locality: [Australia] Northern Territory, Kakadu National Park, Radon Springs, 12°45'S 132°55'E; NTM; ♂].

Distribution. —Australia.

haitimlain Wells, 1991: 497 [type locality: Papua New Guinea, Central Province, Laloki River at Rouna Falls, 9°25'S 147°27'E; ANIC; ♂; case].

Distribution. —Papua New Guinea.

imparalobata Wells, 1990c: 113 [type locality: [Australia] NE Queensland, Yuccabine Creek; NMV; ♂].

Distribution. —Australia.

khukri Wells & Dostine, 2016: 596 [type locality: [Australia], Northern Territory, Petherick's Rainforest Reserve; ANIC; ♂].

Distribution. —Australia.

kukensis Wells, 1991: 495 [type locality: Papua New Guinea, East Highlands Province, Ukarumpa, Ba'i River, 6°17'S 145°50'E; ANIC; ♂; ♀; case].

Distribution. —Papua New Guinea.

lacustris Mey, 2006b: 203 [type locality: Indonesia, Sulawesi Selatan, Soroako, Lake Matano; LIPI; ♂; ♀]. —Malicky 2013: 42 [possible junior synonym to *H. lititia*].

Distribution. —Indonesia.

litita Wells, 1990b: 393 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Toraut and Tumpah R. junction; NMV; ♂; ♀; case]. —Wells and Huisman 2001: 210 [distribution]. —Malicky et al. 2010: 163 [distribution]. —Malicky 2013: 42 [possible senior synonym to *H. lacustris*].

Distribution. —Indonesia.

litua Wells, 1979b: 328 [type locality: [Australia] Western Australia, Jandakota; ANIC; ♂]. —Wells 1985b: 13 [larva, case]. —Neboiss 1986: 77 [atlas; ♂].

Distribution. —Australia.

loripes Wells, 1979b: 322 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek; WAM; ♂]. —Neboiss 1986: 76 [atlas; ♂].

Distribution. —Australia.

maai Wells, 1991: 498 [type locality: [Indonesia], Irian Jaya (West New Guinea), Waris, 3°30'S 140°55'E; BPBM; ♂].

Distribution. —Indonesia.

marioch Malicky & Graf, 2015: 31 [type locality: Ethiopia, Kleiner Waldbach N von Addis Abeba, 9°05'N, 38°43'E, 2800 m; Collection Malicky; ♂].

Distribution. —Ethiopia.

malleoforma Wells, 1979b: 325 [type locality: [Australia] South Australia, Uraidla, farm dam; ANIC; ♂; ♀]. —Wells 1985b: 13 [larva, case, biology]. —Neboiss 1986: 77 [atlas; ♂; ♀]. —Wells 1995: 232 [distribution]. —Neboiss 2002: 54 [checklist]. —Oláh and Johanson 2010a: 11 [distribution]. —Wells and Johanson 2015: 85 [distribution]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —Australia, New Caledonia.

multilobata Wells, 1979b: 326 [type locality: [Australia] Victoria, Lake Purrumbete; ANIC; ♂; ♀]. —Neboiss 1986: 77 [atlas; ♂; ♀]. —Neboiss 2002: 53 [checklist].

Distribution. —Australia.

- narakain*** Wells, 1991: 497 [type locality: Papua New Guinea, Central Province, Iomari Creek on Bereina-Port Morseby road, 9°04'S 147°06'E; ANIC; ♂; ♀; case].
Distribution. —Papua New Guinea.
- naumanni*** Wells, 1990c: 113 [type locality: [Australia] Western Australia, Charnley River, 2 km SW Roly Hill, CALM Site 25/2; NMV; ♂].
Distribution. —Australia.
- piala*** Wells & Huisman, 1992: 109 [type locality: Brunei, 45 km on Labir road, Sg. Madoram, 50 m; RMNH; ♂]. —Malicky and Chantaramongkol 2007: 1028 [distribution]. —Malicky 2010a: 40 [atlas; ♂].
Distribution. —Brunei, Malaysia.
- pulvina*** Wells, 1979b: 324 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek; WAM; ♂]. —Neboiss 1986: 76 [atlas; ♂]. —Wells et al. 2019: 33 [detection frequency].
Distribution. —Australia.
- quadrata*** Wells, 1990c: 115 [type locality: [Australia] NE Queensland, Yuccabine Creek; NMV; ♂].
Distribution. —Australia.
- radonensis*** Wells, 1990c: 113 [type locality: [Australia] Northern Territory, Kakadu National Park, Radon Springs, 12°45'S 132°55'E; NTM; ♂].
Distribution. —Australia.
- ramosa*** Wells, 1983: 632 [type locality: Australia, Northern Territory, Goanna Lagoon, 1 km W. of Jabiru off Arnhem Highway; NMV; ♂]. —Wells 1985b: 12 [larva; case]. —Neboiss 1986: 78 [atlas; ♂; ♀]. —Wells et al. 2019: 33 [detection frequency].
Distribution. —Australia.
- rovid*** Oláh & Johanson, 2010a: 11 [type locality: Malaysia, Sabah, Tawau, Maliau Basin, Nepenthes Camp, crossing stream, 4°43'58.9"N 116°52'40.7"E, 994 m; NHRS; ♂].
Distribution. —Malaysia.
- sarina*** Oláh, 2012: 48 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Sarinam River, 0°50'04.24"S 130°47'59.22"E; Collection Oláh; ♂]. —Oláh 2016: 109 [distribution]. —Oláh and Kovács 2018: 178 [distribution].
Distribution. —Indonesia.
- selaput*** Wells & Huisman, 1992: 109 [type locality: Brunei, Sg. Temburong, 140 m; RMNH; ♂]. —Malicky 2010a: 40 [atlas; ♂].
Distribution. —Brunei.
- sentisa*** Wells, 1979b: 322 [type locality: [Australia] Western Australia, Millstream H.S., 21°35'S 117°04'E; ANIC; ♂]. —Neboiss 1986: 79 [atlas; ♂].
Distribution. —Australia.
- sheldoni*** Wells, 2005: 388 [type locality: Australia, N Queensland, 18°57'S 146°10'E, Mt Spec State Forest, Camp Creek tributary. 760 m; NMV; ♂].
Distribution. —Australia.
- simplex*** (Mosely, 1934a): 145 [type locality: [Australia] Warwick, Queensland; Collection Tillyard (since transferred to NHMUK according to Neboiss 2002: 53);

♂; in *Xuthotrichia*]. —Mosely and Kimmins 1953: 521 [♂]. —Wells 1979b: 315 [♂, ♀, to *Hellyethira*]. —Wells 1985b: 10 [larva, case]. —Neboiss 1986: 76 [atlas; ♂; ♀]. —Neboiss 2002: 53 [checklist]. —Oláh and Johanson 2010a: 13 [distribution]. —*vallecula* Neboiss, 1977: 42 [type locality: [Australia] Hellyer River Gorge, Tasmania; NMV; ♂; ♀]. —Wells 1979b: 315 [to synonymy].

—*hiana* Oláh & Johanson, 2010a: 10 [type locality: Australia, Queensland, Brisbane Forest Park, Northbrook Creek, downstream 3rd bridge on Northbrook Parkway from Cedar Flats, 27°18.203'S 152°41.380'E, 174 m; ANIC; ♂]. —Wells 2012: 66 [to synonymy].

Distribution. —Australia.

spinosa Wells, 1990c: 115 [type locality: [Australia] NE Queensland, Yuccabine Creek; NMV; ♂].

Distribution. —Australia.

tros Malicky & Chantaramongkol, 2007: 1027 [type locality: Thailand, Kao Soi Dao NP, 13°06'N 102°12'E, 300 m; Collection Malicky; ♂]. —Melnitsky and Malicky 2008: 25 [distribution]. —Malicky 2010a: 40 [atlas; ♂].

Distribution. —Thailand.

vernoni Wells, 1983: 632 [type locality: Australia, Queensland, Crystal Creek, nr turnoff to Mt Spec; NMV; ♂]. —Wells 1985b: 12 [larva; case]. —Neboiss 1986: 79 [atlas; ♂; ♀]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

veruta Wells, 1985a: 97 [type locality: Australia, Northern Territory, Magela Creek, S. of Georgetown Billabong; NTM; ♂; ♀]. —Neboiss 1986: 79 [atlas; ♂; ♀]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

Genus *Hydroptila* Dalman, 1819

Hydroptila Dalman, 1819: 125 [type species: *Hydroptila tineoides* Dalman, 1819, monotypic]. —Kolenati 1848: 104 [revision]. —McLachlan 1880: 5010 [revision]. —Mosely 1939b: 257 [key to the British species]. —Ross 1944: 141, 142 [diagnosis of larvae; species key for adults]. —Bueno-Soria 1984: 83 [revision of Mexican and Central American species]. —Wells 1978: 746 [key to adults of Australian species]. —Kumanski 1979: 7 [key to species of Bulgaria]. —Marshall 1979b: 200 [generic review]. —Blickle 1979: 11 [key to species of America north of Mexico]. —Lewis and Fairchild 1983: 134 [phoretic association observed]. —Wells 1984: 263 [key to males from New Guinea and New Britain]. —Wells 1985b: 3 [larva; pupa; case; key to cased Australian larvae]. —Wells 1990b: 379 [key to adults of North Sulawesi species]. —Flint 1991b: 46 [key to Antioquian species]. —Wells 1991: 491 [key to males of New Guinea]. —Botosaneanu 1992: 59 [key to species in the Levant]. —Moulton and Stewart 1996: 92 [key to species of the Interior Highlands of North America]. —Wells 1997: 1 [checklist; key to species of larvae]. —Kachalova in Medvedev 1998: 185 [key to the species of the

- European part of the USSR]. —Harris and Holzenthal 1999: 16 [key to Central American species]. —Zhou et al. 2009a: 909 [key to Chinese species].
- Phrixocoma* Eaton, 1873: 132 [type species: *Hydroptila sparsa* Curtis, 1834, original designation]. —McLachlan 1880: 511 [to synonymy].
- Hydropneuma* Enderlein, 1929: 232 [type species: *Hydropneuma juba* Enderlein, 1929, original designation]. —Kimmins 1957a: 107 [transferred to *Hydroptila*].
- Hydroptilina* Martynov, 1934: 117 [type species: *Hydroptilina angustipennis* Martynov, 1934, monotypic]. —Fischer 1971: 289 [to synonymy, following Lepneva, 1953: 406]. —Marshall 1979b: 200 [considered as a synonym of *Hydroptila*].
- Oxydroptila* Martynov, 1935: 114 [type species: *Oxydroptila furcata* Martynov, 1935, original designation]. —Marshall 1979b: 200 [to synonymy].
- Oeceotrichia* Ulmer, 1951: 85 [type species: *Oeceotrichia elongata* Ulmer, 1951, original designation]. —Marshall 1979b: 200 [to synonymy].
- Pasiotrichia* Ulmer, 1951: 90 [type species: *Pasiotrichia crenata* Ulmer, 1951, original designation]. —Marshall 1979b: 200 [to synonymy].
- Sumatranotrichia* Ulmer, 1951: 87 [type species: *Sumatranotrichia trullata* Ulmer, 1951, original designation]. —Marshall 1979b: 200 [to synonymy].

Hydroptila is a large, cosmopolitan genus occurring in all regions excluding polar regions. It is the most species-rich genus in the family, consisting of 495 extant species and one fossil species. Marshall (1979b) divided *Hydroptila* into thirteen species groups (*capensis*, *consimilis*, *dikirilagoda*, *forcipata*, *losida*, *occulta*, *pulchricornis*, *sparsa*, *tigurina*, *tineoides*, *uncinata*, *vectis*, *waubesiana*) which she thought might one day be recognized as subgenera, based on distribution and form of the male and female genitalia. Despite the large number of species and the proposed species groups, she also listed several characters that unite the genus, including basic structure of the genitalia, thorax, absence of ocelli, presence of dorsal postoccipital scent-organs in male adults, and the general appearance of the immature stage. The larvae of *H. delineata* were described by Sibley (1926), and larvae of many other species have been described since (Lepneva 1932, 1964; Ross 1944; Nielsen 1948; Hanna 1961; Jacquemart and Coineau 1962; Botosaneanu and Sykora 1963; Flint 1964; Jacquemart 1965; Hicken 1967; Fahy 1971; Ito and Kawamura 1980; Botosaneanu and Giudicelli 1981; Wells 1985b, 1997; Keiper and Foote 1999).

abantica Sipahiler, 1996: 30 [type locality: [Turkey, Bolu, Abant, 1400 m. (from the spring); ZSM; ♂; ♀]. —Malicky 2004a: 55 [atlas]. —Malicky 2005b: 543 [checklist]. —Sipahiler 2005: 396 [distribution]. —Sipahiler 2007: 38 [distribution]. —Sipahiler 2008: 104 [checklist].

Distribution. —Turkey.

abbotti Moulton & Harris, 1997: 494 [type locality: United States, Texas, Anderson Co., Skeet Branch, Engeling Wildlife Management Area, 3.2 km W Blackfoot; NMNH; ♂]. —Abbott et al. 1997: 44 [distribution].

Distribution. —U.S.A.

acadia Ross, 1941a: 63 [type locality: [Canada], Nova Scotia, Hubbard; INHS; ♂; ♀]. —Blickle 1979: 47, 69 [checklist; ♂]. —Harris et al. 2012: 5 [♂; checklist]. —Denson et al. 2016: 5 [distribution].

Distribution. —Canada, U.S.A.

acantha Wells & Mey, 2002: 128 [type locality: [Philippines] Panay, San Remigio, Aningalan; ZMHB; ♂].

Distribution. —Philippines.

acinacis Wells, 1978: 755 [type locality: [Australia] Victoria, Koornalla, Traralgon Creek, La Trobe River Environmental Survey, Site 24a; NMV; ♂; ♀]. —Wells 1985b: 6 [larva]. —Neboiss 1986: 63 [atlas; ♂; ♀]. —Neboiss 2002: 52 [checklist].

Distribution. —Australia.

acuminata Bueno-Soria, 1984: 88 [type locality: Mexico, Tamaulipas, 40 km S Ciudad Victoria, Río Purificación; CNIN; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Bowles et al. 2007: 21 [distribution; biology].

Distribution. —Mexico, U.S.A.

acuta Mosely, 1930a: 177 [type locality: [France], Corsica, Corte; NHMUK; ♂; ♀]. —Jacquemart and Coineau 1962: 50 [♂; larva]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 46 [atlas; ♂]. —González et al. 1990: 214 [distribution]. —Malicky 1997: 139 [distribution; ♂]. —Valle 2001: 65 [distribution]. —Malicky 2002: 4 [distribution]. —Coppa and Tachet 2004: 124 [♀]. —Malicky 2004a: 57 [atlas]. —Malicky 2005b: 543 [checklist]. —González and Menéndez 2011: 118 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 136 [distribution]. —Ruiz-García et al. 2016: 3 [distribution].

Distribution. —France, Italy, Spain.

acutangulata Yang & Wang in Yang, Wang, and Leng 1997: 285 [type locality: [China], Longyuwan forest farm, 1000 m, Luanchuan County, Henan Prov.; NAUJ; ♂].

Distribution. —China.

adana Mosely, 1948b: 81 [type locality: [Yemen], Western Aden Protectorate, Jebel Harir, c. 5000 ft; NHMUK; ♂]. —Botosaneanu and Gasith 1971: 99 [distribution]. —Botosaneanu, 1973: 66 [♂]. —Botosaneanu 1982b: 11 [habitat threat]. —Malicky 1983b: 50, 52 [atlas; ♂; ♀]. —Botosaneanu 1992: 63 [wings; head; ♂; ♀]. —Malicky 1999a: 345 [distribution]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 62 [atlas]. —Malicky 2005b: 543 [checklist]. —Chvojka 2006: 253 [distribution]. —Malicky 2014b: 17 [teratological structures].

Distribution. —Iran, Israel, Yemen.

aegyptia Ulmer, 1963: 267 [type locality: [Egypt], Maadi, Nilufer; ZMUH; ♂]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti et al. 1978: 28 [larva; ecology]. —Moretti and Bicchierai 1979: 173 [androconial structure]. —Moretti and Cianficconi 1981: 201 [checklist]. —Moretti et al. 1981: 350, 354 [biology; distribution]. —Malicky 1983b: 43 [atlas; ♂]. —Kumanski and Malicky 1984:

- 199 [distribution]. —Kumanski 1985: 135 [♂]. —Moubayed and Botosaneanu 1985: 63 [distribution]. —Spuris 1989: 15 [checklist]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Botosaneanu 1992: 81 [♂; ♀]. —Bicchierai and Moretti 1994: 108, 111 [palps]. —Dallai and Afzelius 1995: 166 [sperm structure]. —Cianficconi et al. 1999a: 57 [distribution]. —Valle 2001: 65 [distribution]. —Cianficconi et al. 2002: 146 [distribution]. —Spinelli and Corallini 2002: 32 [leg morphology]. —Sipahiler 2003b: 33 [distribution]. —Malicky 2004a: 52 [atlas]. —Cianficconi et al. 2004a: 256, 257, 258 [distribution; case; biology]. —Malicky 2005b: 543 [checklist]. —Malicky 2005a: 59 [distribution]. —Sipahiler 2005: 396 [distribution]. —Chvojka 2006: 253 [distribution]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Corallini 2007: 76 [absence of goblet cells]. —Szczyński and Godunko 2008: 14 [checklist]. —Ujvárosi et al. 2008: 112 [checklist]. —Oláh 2010: 91 [distribution]. —Cianficconi et al. 2011: 47 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Corallini et al. 2013a: 38 [checklist]. —Karaouzas and Malicky 2015: 14 [distribution]. —Dia 2015: 51 [distribution]. —Cianficconi et al. 2016: 136 [distribution]. —Corallini and Bicchierai 2016: 151 [biology]. —Sipahiler 2018: 41 [distribution].
- kurnas* Malicky, 1974: 109 [type locality: [Greece], Kreta, Kournas-See]. —Botosaneanu and Malicky 1978: 340 [to synonymy].
- Distribution.** —Bulgaria, Egypt, Greece, Iran, Italy, Lebanon, Tunisia, Romania, Russia, Turkey, Ukraine.
- africana* Kimmins, 1958a: 364 [type locality: [Zimbabwe], S. Rhodesia, Victoria Falls; NHMUK; ♂].
- Distribution.** —Zimbabwe.
- agosensis* Mey, 2003b: 431 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂].
- Distribution.** —Philippines.
- ajax* Ross, 1938a: 127 [type locality: United States, Illinois, Oakwood, along Salt Fork River; INHS; ♂]. —Ross 1944: 153 [♂; ♀; distribution]. —Denning 1947b: 174 [distribution]. —Etnier 1965: 146 [checklist]. —Blickle 1979: 47, 71 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Huryn and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 9 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Bueno-Soria 1984: 109 [♂; distribution]. —Tarter 1990: 239 [checklist]. —Masteller and Flint 1992: 69 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 95 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Abbott et al. 1997: 44 [distribution]. —Ruiter 1999: 165 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Blinn and Ruiter 2005: 68 [distribution; biology]. —Blinn and Ruiter 2006: 332 [biology; distribution]. —Zeullig et al. 2006: 42 [distribution]. —Zack et al. 2006: 134 [phenology; distribution]. —Bowles et al. 2007: 21 [distribution; biology]. —Chamorro-Lacayo et al. 2007: 42 [checklist]. —Blinn and Ruiter 2009a: 304 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Houghton

et al. 2011a: 388 [distribution; biology]. —Armitage et al. 2011: 13 [checklist]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Harris et al. 2012: 5 [♂; distribution]. —de Walt et al. 2016: 51 [distribution]. —Houghton et al. 2017: 62 [checklist]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Mexico, Nicaragua, U.S.A.

alabama Harris & Kelley, 1984a: 572 [type locality: [United States], Alabama, Escambia County, Little Escambia Creek at Hwy. 31; NMNH; ♂]. —Harris et al. 1984: 108 [distribution]. —Harris et al. 1991: 166 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Masteller and Flint 1992: 69 [checklist]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —DeWalt and Heinold 2005: 41 [phenology; distribution]. —Myers et al. 2011: 105 [distribution]. —Harris et al. 2012: 5 [distribution]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

alai Johanson, Wells, Malm, & Espeland, 2011: 291 [type locality: [Vanuatu] Espiritu Santo, Central Santo, stream in small canyon crossing path to village, 5.5 km NW Nambel, 208 m, loc#21, 15°27.459'S 167°04.022'E; NHRS; ♂].

Distribution. —Vanuatu.

alara Sipahiler, 1994: 12 [type locality: Turkey, Antalya, Gündogmus, Güneycik Köyü, Alara çayı, Alibey köprüsü, 31°48'E, 36°46'N, 180 m; depository not designated; ♂]. —Malicky 2004a: 63 [atlas]. —Malicky 2005b: 543 [checklist] —Sipahiler 2005: 396 [distribution].

Distribution. —Turkey.

albicornis Hagen, 1861: 275 [type locality: Canada (Osten Sacken), St. Lawrence River; MCZ; ♂]. —Eaton 1873: 138 [distribution; as *Phrixocoma*]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 157 [♂; distribution]. —Ross 1938b: 9 [lectotype designated; ♂]. —Ross 1944: 151 [♂; ♀; larva; distribution]. —Denning 1947b: 174 [distribution]. —Etnier 1965: 146 [checklist]. —Unzicker et al. 1970: 172 [distribution]. —Etnier and Schuster 1979: 17 [distribution]. —Roy and Harper 1979: 150 [checklist]. —Blickle 1979: 47, 69 [checklist; ♂]. —Huryn and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 9 [distribution]. —Bowles and Mathis 1989: 238 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 95 [♂; distribution]. —Houghton et al. 2001: 504 [distribution]. —Myers et al. 2011: 105 [checklist]. —Armitage et al. 2011: 14 [checklist]. —DeWalt et al. 2016: 5 [distribution]. —Houghton et al. 2017: 62 [checklist]. —Bowles et al. 2020: 7 [distribution].

Distribution. —Canada, U.S.A.

aldricki Bueno-Soria, 1984: 108 [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂].

Distribution. —Mexico.

amoena Ross, 1938a: 124 [type locality: [United States], Illinois, Herod; INHS; ♂]. —Ross 1944: 150 [♂; ♀; distribution]. —Denning 1947b: 173 [distribution]. —Morse and Blickle 1953: 72 [distribution]. —Etnier 1965: 146 [distribution].

—Unzicker et al. 1970: 172 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Etnier and Schuster 1979: 17 [distribution]. —Roy and Harper 1979: 150 [distribution]. —Etnier and Schuster 1979: 17 [checklist]. —Blickle 1979: 47 63 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Huryn and Foote 1983: 790 [distribution]. —Harris et al. 1984: 108 [distribution]. —Bowles and Mathis 1989: 238 [distribution]. —Harris et al. 1991: 167 [distribution]. —Masteller and Flint 1992: 69 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Floyd and Morse 1993: 176 [distribution]. —Moulton and Stewart 1996: 96 [♂; distribution]. —Houghton et al. 2001: 504 [distribution]. —Etnier 2010: 485 [distribution]. —Armitage et al. 2011: 14, 32 [checklist; ♂]. —Houghton et al. 2011b: 5 [phenology; habitat; distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 62 [checklist].

Distribution. —Canada, U.S.A.

ampoda Ross, 1941b: 16 [type locality: [Canada], Moser River, Nova Scotia, Gold Mine Brook; INHS; ♂; ♀]. —Etnier 1968: 191 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Roy and Harper 1979: 150 [checklist]. —Blickle 1979: 47, 63 [checklist; ♂]. —Roy and Harper 1981: 105 [distribution]. —Waltz and McCafferty 1983a: 9 [distribution]. —Masteller and Flint 1992: 69 [checklist]. —Houghton et al. 2001: 504 [distribution]. —Flint 2014: 90 [distribution]. —Myers et al. 2011: 105 [distribution]. —Houghton et al. 2017: 62 [checklist].

Distribution. —Canada, U.S.A.

ancistrion Flint, 1968b: 48 [type locality: Jamaica, Portland, Rio Grande, at Fellowship; NMNH; ♂; ♀]. —Flint 1968a: 82 [checklist]. —Botosaneanu and Hyslop 1998: 15 [distribution]. —Botosaneanu 2002b: 83 [checklist].

Distribution. —Jamaica.

andalusiaca González & Cobo, 1994: 253 [type locality: Spain, Cadiz, Puente de la Terrona, river Guadalete, 360 m; DZUSC; ♂]. —Malicky 1997: 140 [distribution; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 543 [checklist]. —González and Menéndez 2011: 118 [distribution]. —Martín et al. 2015: 74 [distribution].

Distribution. —Spain.

angulata Mosely, 1922: 179 [type locality: [England], “Britain”; NHMUK; ♂]. —Mosely 1923: 292 [scent organ]. —Martynov 1934: 130 [♂]. —Mosely 1939b: 262 [♂]. —Schmid 1952: 650 [distribution]. —Nybom 1960: 18 [checklist]. —Schmid 1960: 98 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Malicky 1974: 122 [checklist]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 47, 52 [atlas; ♂; ♀]. —Kumanski 1985: 123 [♂]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Rojas-Camousseight and Tachet 1988: 313–314 [♀]. —Usseglio-Polatera and Bournaud 1989: 25 [distribution]. —Spuris 1989: 15 [checklist]. —González et al. 1990: 214 [distribution]. —Oláh 1994: 282 [distribution]. —Malicky 1997: 140 [distribution; ♂]. —Malicky 1999c: 96 [distribution]. —Cianficconi et al. 1999b: 278 [distribution]. —Morse et al. 2001: 102 [distribution]. —Mirmoayed and

- Malicky 2002: 164 [checklist]. —Gullefors 2002: 138 [checklist]. —Gullefors 2003: 194, 195 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Cibaitė 2003b: 8 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 57 [atlas]. —Malicky 2005b: 543 [checklist]. —Coppa and Tachet 2005: 132 [distribution]. —Yang et al. 2005: 458 [checklist]. —Graf et al. 2005: 55 [distribution]. —Gullefors 2005a: 118 [distribution]. —Gullefors 2005b: 138 [distribution]. —Komzák and Chvojka 2005: 65 [distribution]. —Malicky 2005a: 59 [distribution]. —Hohmann 2005: 106 [checklist]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Gullefors 2006: 136 [distribution]. —Morse et al. 2006: 309, 321 [♂; ♀; distribution]. —Wiggers et al. 2006: 54 [checklist]. —Robert 2007: 82 [checklist]. —Ivanov and Melnitsky 2007: 32 [distribution]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —González and Menéndez 2008: 188 [distribution]. —Schrinkel et al. 2008: 90 [checklist]. —Višinskienė 2009: 27 [checklist]. —Neu 2010: 149 [♀]. —Ivanov 2011: 195 [checklist]. —Corallini and Cianficconi 2011: 628 [checklist]. —Cianficconi et al. 2011: 47 [distribution]. —González and Menéndez 2011: 118 [distribution]. —Lukáš and Chvojka 2011: 116 [distribution]. —Viidalepp et al. 2011: 194, 196 [distribution]. —Lock and Goethals 2012: 28 [checklist]. —Komzák and Chvojka 2012: 719 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —O'Connor 2013: 63 [distribution]. —O'Connor and O'Connor 2014: 273 [distribution]. —O'Connor and Bond 2014: 24 [distribution]. —O'Connor 2015: 28, 76 [distribution]. —Stanić-Koštrovan et al. 2015: 85 [distribution]. —Stanić-Koštrovan et al. 2015: 85 [distribution]. —Cianficconi et al. 2016: 137 [distribution]. —Chuluunbat et al. 2016: 102 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Yang et al. 2016: 476 [checklist]. —O'Connor and O'Connor 2016: 165 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —Gullefors 2016: 155 [checklist]. —Corallini and Bicchieri 2016: 151 [biology]. —Küttner et al. 2016: 178 [distribution]. —Wallace 2016: 15, 18, 24 [conservation status]. —O'Connor and O'Connor 2017b: 52 [distribution]. —Lock and van Butsel 2017: 33 [distribution; ♂; ♀]. —O'Connor and O'Connor 2018: 81 [distribution]. —Valle and Lodovici 2018: 146 [distribution]. —O'Connor et al. 2018: 23 [distribution]. —Kročá and Komzák 2020: 146 [distribution]. —Park and Kong 2020: 297 [checklist]. —Navara et al. 2020: 46 [distribution]. —Smirnova et al. 2020: 68 [distribution].
- emarginata* Martynov, 1927: 175 [type locality: [Uzbekistan], Tashkent; depository not designated; ♂]. —Martynov 1934: 133 [♂]. —Schmid 1959b: 692 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu 1970: 289 [distribution; ♀]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Mey 1981: 56 [distribution]. —Spuris 1989: 15 [checklist]. —Kumanski 1990: 46 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Malicky 1997: 140 [to synonymy]. —Malicky 2005b: 543 [to synonymy]. —Huang et al. 2005: 469 [distribution]. —Park and Kong 2020: 297 [checklist].

—*bajgirana* Botosaneanu, 1983: 139 [type locality: Iran Bajgiran Ostan 9 5500 ft au col du Karaul Dagh petite source dans un ravin sec; CNC; ♂]. —Kumanski 1990: 46 [as synonym of *H. emarginata*]. —Xue and Yang 1991: 21 [distribution]. —Xue et al. 1992: 353–356 [distribution]. —Malicky 1997: 140 [to synonymy]. —Malicky 2005b: 543 [to synonymy]. —Lonsdale 2020: 32 [holotype depository].

Distribution. —Albania, Austria, Belgium, Bosnia-Herzegovina, China, Czech Republic, England, Estonia, Finland, France, Germany, Greece, Iran, Ireland, Italy, Kazakhstan, Korea, Lithuania, Luxembourg, Mongolia, Netherlands, Pakistan, Portugal, Serbia, Slovakia, Slovenia, Russia, Slovakia, Spain, Sweden, Uzbekistan.

angulifera Kumanski, 1974: 71 [type locality: [Bulgaria], Le Rhodope, la rivière Trigradskä, juste avant sa confluence avec la rivière Tchairska, 800 m; SOFM; ♂; ♀]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Kumanski 1979: 14 [♂; distribution]. —Malicky and Moretti 1987: 194 [♂]. —Kumanski 1993: 39 [distribution]. —Malicky 2004a: 53 [atlas]. —Malicky 2005b: 543 [checklist]. —Oláh 2017: 136 [distribution].

Distribution. —Bulgaria.

angusta Ross, 1938a: 130 [type locality: United States, Illinois, Muncie, along Stony Creek; INHS; ♂]. —Ross 1944: 152 [♂; ♀]. —Edwards 1973: 506 [distribution]. —Hamilton et al. 1975: 1003 [biology]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Resh et al. 1978: 383 [distribution]. —Blickle 1979: 47–73 [checklist; ♂]. —Huryn and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 9 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Harris et al. 1984: 108 [distribution]. —Bueno-Soria 1984: 122 [♂; distribution]. —Ruiter 1990: 91 [distribution]. —Harris et al. 1991: 168 [distribution]. —Masteller and Flint 1992: 69 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton and Stewart 1996: 96 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton and Stewart 1998: 105 [biology; distribution]. —Ruiter 1999: 165 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Baumgardner and Bowles 2005: 11 [distribution]. —Zeullig et al. 2006: 42 [distribution]. —Bowles et al. 2007: 21 [distribution; biology]. —Armitage et al. 2011: 14 [checklist]. —de Walt et al. 2016: 51 [distribution]. —Houghton et al. 2017: 62 [checklist]. —Mendez et al. 2019: 128 [checklist].

Distribution. —Mexico, U.S.A.

angustata Mosely, 1939c: 46 [type locality: Egypt; NHMUK; ♂]. —Ulmer 1963: 267 [distribution]. —Dia and Botosaneanu 1982: 140 [description of gynandromorphous specimen]. —Malicky 1983b: 47 [atlas; ♂]. —Kumanski and Malicky 1984: 199 [distribution]. —Moubayed and Botosaneanu 1985: 63 [distribution]. —Kumanski 1985: 124 [♂]. —Sipahiler and Malicky 1987: 106, 122 [distribution]. —Rojas-Camousseight and Tachet 1988: 315 [♀]. —Spuris 1989: 15 [checklist]. —González et al. 1990: 214 [distribution]. —Botosaneanu 1992: 63 [♂; ♀]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Nógrádi

- 1994: 277 [♂ ♀]. —Malicky 1997: 141 [distribution; ♂]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Malicky 1999c: 96 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Malicky 1999f: 31 [distribution]. —Uherkovich and Nógrádi 2001: 95 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Valle 2001: 66 [distribution]. —Mirmoayed and Malicky 2002: 164 [distribution]. —Ujvárosi 2002: 384 [distribution]. —Sipahiler 2003b: 33 [distribution]. —Malicky 2004a: 57 [atlas]. —Huang et al. 2005: 469, 471 [distribution]. —Malicky 2005a: 59 [distribution]. —Sipahiler 2005: 396 [distribution]. —Chvojka 2006: 253 [distribution]. —Sipahiler 2007: 38 [distribution]. —Szczęsny and Godunko 2008: 14 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Oláh 2010: 91 [distribution]. —Ivanov 2011: 195 [checklist]. —González and Menéndez 2011: 118 [distribution]. —Komzák and Kroča 2011: 189 [distribution]. —Sipahiler 2012a: 7 [distribution]. —Kiss 2012: 28 [distribution]. —Komzák and Chvojka 2012: 719 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Malicky 2014b: 17 [teratological structures]. —Martín et al. 2015: 75 [distribution]. —Dia 2015: 51 [distribution]. —Sipahiler 2016: 12 [distribution]. —Cianficconi et al. 2016: 139 [distribution]. —Sipahiler 2016: 12 [distribution]. —Yang et al. 2016: 476 [checklist]. —Melnitsky et al. 2017: 6 [distribution]. —Sipahiler 2017b: 12 [distribution]. —Sipahiler 2018: 41 [distribution].
- neglecta* Kumanski, 1983: 15 [type locality: [Bulgaria], from the outflow of limestone spring “Topliza” near Goze Delchev; SOFM; ♂; ♀]. —Kumanski 1985: 124 [to synonymy]. —Sipahiler and Malicky 1987: 84 [treated as likely synonym]. —Malicky 2005b: 543 [checklist].
- Distribution.** —Austria, Bulgaria, China, Cyprus, Czech Republic, Egypt, Greece, Hungary, Iran, Italy, Kazakhstan, Lebanon, Romania, Russia, Spain, Syria, Turkey, Ukraine, Uzbekistan.
- angustipennis* (Martynov, 1934): 144 [type locality: [Russia]; depository not designated; ♂; in *Hydroptilina*]. —Spuris 1989: 16 [checklist]. —Ivanov 2011: 195 [checklist].
- Distribution.** —Russia.
- annulicornis* Maatsumura, 1931: 1136 [type locality: [Japan]; holotype not designated; as *Hydroptilia*].
- Distribution.** —Japan.
- anongraksa* Malicky & Chantaramongkol, 2007: 1016 [type locality: Thailand, Sai Yok NP, 14°26'N 98°51'E, 100 m; Collection Malicky; ♂]. —Malicky 2010a: 27 [atlas; ♂].
- Distribution.** —Thailand.
- antennopedia* Sykora & Harris, 1994: 68 [type locality: [United States], Pennsylvania, Fayette Co., Youghiogheny River Lake outflow near Confluence; CMNH; ♂]. —Houghton et al. 2001: 504 [distribution]. —Myers et al. 2011: 106 [distribution]. —Houghton et al. 2017: 62 [checklist].
- Distribution.** —U.S.A.

antilliarum Flint, 1968a: 58 [type locality: Dominica, Pont Casse, 1.6 mi W; NMNH; ♂; ♀]. —Malicky 1983c: 264 [distribution]. —Botosaneanu 1989: 100 [♂; scent organ; distribution]. —Flint and Sykora 1993: 50 [checklist]. —Botosaneanu 1994a: 40 [distribution]. —Sheath et al. 1995: 890 [red algal association]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 83 [checklist]. —Botosaneanu and Thomas 2005: 40 [distribution].

Distribution. —Dominica, Guadeloupe, Martinique, St. Lucia.

apalachicola Harris, Pescador, & Rasmussen, 1998: 221 [type locality: [United States], Florida, Liberty County, Nature Conservancy Apalachicola Bluffs and Ravines Preserve, Little Sweetwater Creek; NMNH; ♂]. —Pescador et al. 2004: 132 [checklist]. —Harris et al. 2012: 5 [checklist].

Distribution. —U.S.A.

arctia Ross, 1938a: 129 [type locality: United States, Idaho, Bear River Narrows; INHS; ♂]. —Ross and Spencer 1952: 47 [distribution]. —Denning 1947b: 175 [distribution]. —Flint and Herrmann 1976: 898 [distribution]. —Resh and Sorg 1978: 396 [distribution; as *arcita*]. —Blickle 1979: 47, 67 [checklist; ♂]. —Bueno-Soria 1984: 97 [♂; distribution]. —Moulton et al. 1994: 169 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Ruiter 1999: 165 [distribution]. —Houghton 2001: 90 [distribution]. —Flint et al. 2003: 31 [distribution; does not occur in Hawaii misidentification of *H. potosina*]. —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2005: 68 [distribution; biology]. Blinn and Ruiter 2006: 332 [biology; distribution]. —Zack et al. 2006: 134 [phenology; distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Blinn and Ruiter 2009a: 303 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Vieira et al. 2009: 257 [distribution]. —Blinn and Ruiter 2013: 280, 291 [biology; distribution]. —Mendez et al. 2019: 118 [checklist]. —Razo-González et al. 2020: 5 [distribution].

—***acoma*** Denning, 1947b: 175 [type locality: United States, California, Morgan Hill; ♂; UMSP]. —Blickle 1979: 47 [to synonymy].

Distribution. —Canada, Mexico, U.S.A.

arethusia Malicky, 1997: 148 [type locality: Portugal, Mantelaes; Collection Malicky; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 543 [checklist]. —González and Menéndez 2011: 118 [distribution]. —Martínez et al. 2016: 51 [distribution].

Distribution. —Portugal, Spain.

argentinica Flint, 1983: 43 [type locality: Argentina, Pcia. Tucumán, S Concepción; NMNH; ♂; ♀]. —Angrisano 1995a: 509 [distribution]. —Angrisano 1999: 32 [checklist]. —Blahnik et al. 2004: 5 [distribution]. —Paprocki et al. 2004: 11 [checklist]. —Angrisano and Sganga 2007: 32 [♂; ♀; distribution]. —Dumas et al. 2009: 366 [distribution]. —Calor 2011: 321 [checklist]. —Rueda Martín 2011: 6 —Dumas and Nessimian 2012: 15 [checklist]. —Paprocki and França 2014: 45 [checklist]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina, Bolivia, Brazil, Uruguay.

argosa Ross, 1938a: 131 [type locality: [United States], Wyoming, Parco, along North Platte River; INHS; ♂]. —Denning 1947a: 149 [distribution]. —Resh and Sorg 1978: 396 [distribution]. —Blickle 1979: 47, 73 [checklist; ♂]. —Newell et al. 2001: 192 [distribution; phenology]. —Zack et al. 2006: 134 [phenology; distribution]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

armata Ross, 1938a: 123 [type locality: [United States], Indiana, Winamac, drainage ditch west of town; INHS; ♂; ♀]. —Ross 1944: 147 [♂; ♀; larva; case; distribution]. —Denning 1947b: 173 [distribution]. —Etnier 1965: 146 [distribution]. —Unzicker et al. 1970: 172 [distribution]. —Edwards 1973: 506 [distribution]. —Etnier and Schuster 1979: 17 [distribution]. —Roy and harper 1979: 150 [distribution]. —Etnier and Schuster 1979: 17 [checklist]. —Blickle 1979: 47, 65 [checklist; ♂]. —Parker and Voshell 1981: 4 [distribution]. —Harris et al. 1982a: 510 [distribution]. —Waltz and McCafferty 1983a: 9 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Harris et al. 1984: 108 [distribution]. —Bowles and Mathis 1989: 238 [distribution]. —Tarter 1990: 239 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Harris et al. 1991: 169 [distribution]. —Masteller and Flint 1992: 69 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Masteller 1993: 134 [distribution]. —Floyd et al. 1993: 90 [phenology; distribution]. —Moulton and Stewart 1996: 97 [♂; distribution]. —Keiper and Foote 1999: 515 [biology; larva]. —Houghton et al. 2001: 504 [distribution]. —Pescador et al. 2004: 133 [distribution]. —DeWalt and Heinold 2005: 41 [phenology; distribution]. —Zeullig et al. 2006: 42 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2011b: 5 [phenology; habitat; distribution]. —Flint 2011: 104 [distribution]. —Harris et al. 2012: 5 [checklist]. —DeWalt et al. 2016: 51 [distribution]. —Denson et al. 2016: 5 [distribution]. —Houghton et al. 2017: 62 [checklist]. —Bowles et al. 2020: 7 [distribution].

Distribution. —Canada, U.S.A.

armathai Schmid, 1959b: 688 [type locality: Iran, Garna; CNC; ♂]. —Malicky 1983b: 45 [atlas; ♂]. —Sipahiler and Malicky 1987: 143 [distribution]. —Mirmoayed and Malicky 2002: 164 [checklist]. —Malicky 2004a: 54 [atlas]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005b: 543 [checklist]. —Sipahiler 2007: 38 [distribution]. —Ivanov 2011: 195 [checklist]. —Sipahiler 2018: 41 [distribution]. —Lonsdale 2020: 32 [holotype depository]. —Oláh et al. 2020: 45 [distribution].

Distribution. —Azerbaijan, Iran, Turkey.

artemis Malicky, 1997: 148 [type locality: [Armenia], Asat bei Chuts; ZMHB; ♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 543 [checklist].

Distribution. —Armenia.

artesa Mathis & Bowles, 1990: 87 [type locality: [United States], Missouri, Shannon County, Alley Spring, Ozark National Scenic Riverways (O.N.S.R.), 5 mi W Eminence, Hwy 106; NMNH; ♂; ♀]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 97 [♂; distribution]. —Armitage et al. 2011: 33 [♂].

Distribution. —U.S.A.

asteria Malicky, 1997: 148 [type locality: [Turkey], Siirt, Botan Cayi-Tal; Collection Malicky; ♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 543 [checklist]. —Sipahiler 2005: 397 [distribution]. —Mirmoayed and Malicky 2002: 164 [distribution].

Distribution. —Turkey.

astraiia Malicky, 1997: 148 [type locality: Iran, 65 km W Schiras; Collection Malicky; ♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 543 [checklist]. —Mirmoayed and Malicky 2002: 164 [distribution].

Distribution. —Iran.

asymmetrica Kumanski, 1990: 50 [type locality: Korea, Province Kangvon, stream and small torrents of the plain near Casan vill., 1–3 km from the sea (ca. 25 km E of Vonsan); SOFM; ♂; ♀]. —Arefina et al. 2002: 97 [distribution]. —Nozaki and Tanida 2007: 245 [distribution]. —Ito et al. 2011: 15 [♂, ♀; distribution]. —Ivanov 2011: 195 [checklist]. —Ito and Nagasaka 2014: 9 [distribution]. —Ito 2015: 15 [distribution]. —Tanida and Kuranishi 2016: 70 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Park and Kong 2020: 297 [checklist].

Distribution. —Japan, Korea, Russia.

atalante Malicky, 1997: 147 [type locality: [Bulgaria], Strandscha-Gebirge, 1 km S Kruschewez, 100 m; Collection Malicky; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 543 [checklist]. —Oláh 2017: 137 [distribution].

Distribution. —Bulgaria.

atargatis Malicky, 1997: 147 [type locality: [Lebanon], Jabboulé; Collection Malicky; ♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 543 [checklist]. —Sipahiler 2005: 397 [distribution]. —Sipahiler 2007: 38 [distribution]. —Sipahiler 2012a: 7 [distribution]. —Dia 2015: 51 [distribution]. —Sipahiler 2016: 12 [distribution].

Distribution. —Lebanon, Turkey.

ate Malicky, 1997: 146 [type locality: Pakistan, Penjab, Hassan Abdal; CNC; ♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 543 [checklist].

Distribution. —India, Pakistan.

auge Malicky, 1997: 146 [type locality: [Greece], Insel Lesbos, Agiassos, 300 m; Collection Malicky; ♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 543 [checklist]. —Malicky 2005a: 59 [distribution]. —Sipahiler 2005: 397 [distribution]. —Karaouzas and Malicky 2016: 18 [distribution].

Distribution. —Greece, Turkey.

auriscuspa Harris, Rasmussen, & Denson, 2012: 3 [type locality: [United States], Florida, Okaloosa Co., Blackwater River at Florida A&M University Biological Station, 4.5 mi NW Holt; NMNH; ♂].

Distribution. —U.S.A.

aurora Malicky, 1997: 146 [type locality: [Tunisia], Oued Maden, 3 km S Nefza, 9°06'E, 36°55'N, 50 m; Collection Malicky; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 543 [checklist]. —González and Menéndez 2011: 118 [distribution].

Distribution. —Morocco, Spain, Tunisia.

autonoe Malicky, 1997: 145 [type locality: [Morocco], El Ksiba, 1100 m; Collection Malicky; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 543 [checklist]. —González and Menéndez 2011: 118 [distribution].

Distribution. —Morocco, Portugal, Spain.

banmaekap Malicky & Chantaramongkol, 2007: 1022 [type locality: Thailand, Ban Mae Kap, Nam Mae To, 18°51'N 98°37'E, 600 m; Collection Malicky; ♂]. —Malicky 2010a: 31 [atlas; ♂].

Distribution. —Thailand.

batang Wells & Huisman, 1992: 98 [type locality: Brunei, Sg. Temburong, 140 m; RMNH; ♂]. —Malicky 2010a: 24 [atlas; ♂].

Distribution. —Brunei.

batanta Oláh in Oláh and Kovács 2018: 178 [type locality: Indonesia, West Papua, Batanta Island, Northern coast, Warmon stream, above second waterfall, S00°50'29.47", E130°42'29.16"; Collection Oláh; ♂].

Distribution. —Indonesia.

baukis Malicky, 1998a: 798 [type locality: [Indonesia, Central Java], Jawa Tengah, Gunung Selamat, Awu; Collection Malicky; ♂]. —Malicky 2010a: 25 [atlas; ♂]. —Malicky et al. 2014a: 5 [distribution].

Distribution. —Indonesia.

begap Wells & Huisman, 1992: 102 [type locality: East Malaysia, Sabah, Tenom; NTM; ♂; ♀]. —Malicky 2010a: 34 [atlas; ♂].

Distribution. —East Malaysia.

bellona Malicky, 1998a: 798 [type locality: [Indonesia], Sumatra, Fort de Kock; Collection Malicky; ♂]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 29 [atlas; ♂]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Indonesia, Malaysia, Thailand.

bengkoka Wells, 1990b: 390 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Tumpah R. a1 km above Toraut R. junction; NMV; ♂; ♀; case]. —Malicky et al. 2010: 163 [distribution]. —Malicky et al. 2014b: 832 [distribution].

Distribution. —Indonesia.

berkait Wells & Huisman, 1992: 101 [type locality: East Malaysia, Sabah, 8.5 km S Long Pa Sia, Sg. Malabit, 04°21'N 115°41'E, 1180 m; RMNH; ♂]. —Malicky 2010a: 34 [atlas; ♂].

Distribution. —Malaysia.

berneri Ross, 1941a: 67 [type locality: [United States], Florida, Alachua County, Santa Fe River; INHS; ♂; ♀]. —Etnier 1965: 146 [distribution]. —Blickle 1979: 47, 69 [checklist; ♂]. —Roy and Harper 1975: 1082 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1982a: 510 [distribution]. —Bowles and Mathis 1989: 238 [distribution]. —Harris et al. 1991: 170 [distribution]. —Moulton and Stewart 1996: 97 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 5 [checklist]. —Denson et al. 2016: 5 [distribution]. —Houghton et al. 2017: 62 [checklist].

Distribution. —Canada, U.S.A.

biankii Ivanov, 1992: 234 [type locality: [Kyrgyzstan], West Tianshan, Kyzart-Ouzy on the river Kara-Su under Chom-Tash mountain chain; ZIN; ♂].

Distribution. —Kyrgyzstan.

bibir Wells & Huisman, 1992: 102 [type locality: East Malaysia, Sabah, Kinabalu National Park, Liwagu River; NTM; ♂; ♀]. —Malicky 2010a: 34 [atlas; ♂].

Distribution. —East Malaysia.

bichromata Mey, 1998a: 557 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

bidens Flint, 1983: 45 [type locality: Argentina, Ocia. Jujuy, Aguas Calientes; NMNH; ♂; ♀]. —Angrisano 1999: 32 [checklist]. —Rueda Martín 2011: 7 [♂; distribution]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina, Bolivia.

bispina Kimmins, 1962: 106 [type locality: [Indonesia], Papua, Kokoda, 1200 ft; NHMUK; ♂; ♀]. —Wells 1984: 269 [distribution]. —Neboiss 1986: 61 [atlas; ♂]. —Wells 1991: 501, 526 [distribution; checklist].

Distribution. —Indonesia.

bispinatella Mey, 2003b: 426 [replacement name for *H. bispina* Wells & Mey, 2002: 126, preoccupied by *H. bispina* Kimmins, 1962: 106] [type locality: [Philippines] Luzon, Camarines Sur, Mt Isarog, Pili, 600–800 m; BPBM; ♂]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2009b: 10 [distribution].

Distribution. —Philippines.

biuncialis Zhou & Yang in Zhou, Sun, and Yang 2009a: 905, 910 [type locality: [China], Jiangxi Province, Wuyishan National Nature Preserve, Litoujian Stream, 100 m upstream of protected area, 27.99°N, 117.86°E, 342 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

blicklei Sykora & Harris, 1994: 72 [type locality: [United States], Maine, Dennistown; UNHC; ♂]. —Myers et al. 2011: 106 [distribution].

Distribution. —U.S.A.

botosaneanui Kumanski, 1990: 48 [type locality: Korea, Province Kangvon, Kumgang Mts., the foothills near the hotel Go-song and Ondžong vill.; SOFM; ♂; ♀]. —Arefina et al. 2002: 97 [distribution]. —Ito et al. 2011: 20 [♂, ♀; distribution]. —Ivanov 2011: 195 [checklist]. —Ito 2015: 8 [checklist]. —Tanida and Kuranishi 2016: 70 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Nozaki et al. 2019: 167 [distribution]. —Park and Kong 2020: 297 [checklist].

Distribution. —Japan, Korea, Russia.

bozontos Oláh, 2012: 48 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Warmon Creek, 2. waterfall, 0°50'23.25"S 130°42'35.18"E; Collection Oláh; ♂].

Distribution. —Indonesia.

brailovskyi Bueno-Soria, 1984: 122 [type locality: Mexico, Veracruz, Chicontepec; CNIN; ♂]. —Harris and Holzenthal 1999: 34 [♂; distribution].

Distribution. —Costa Rica, Mexico.

bribriae Harris, 2002: 50 [type locality: [United States], Florida, Santa Rosa County, Indigo Creek, at Base Rd. 213, Eglin Air Force Base; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 5 [checklist].

Distribution. —U.S.A.

brigittae Gibon, 1987a: 128 [type locality: sur le Niandan à Bambaya; MNHN; ♂]. —Wells and de Moor 2020: 500 [♂; distribution].

Distribution. —Angola, Guinea.

brincki Jacquemart, 1963a: 409 [type locality: [South Africa], National Park, Tugela Valley, 5000 ft, at stony river (Loc. N° 258); IRSNB; ♂].

Distribution. —South Africa.

brissaga Malicky, 1996a: 101 [type locality: [Switzerland], Tessin, Gordevio im Maggiatal; depository not designated; ♂]. —Cianficconi et al. 1999b: 278 [distribution]. —Malicky 2002: 4 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 60 [atlas]. —Malicky 2005a: 60 [distribution]. —Malicky 2005b: 543 [checklist]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Szczęsny and Godunko 2008: 14 [checklist]. —Corallini and Cianficconi 2011: 628 [checklist]. —Corallini et al. 2013a: 38 [checklist]. —Karaouzas and Malicky 2015: 14 [distribution]. —Malicky 2016b: 22 [morphological comparison with *H. tacheti*]. —Cianficconi et al. 2016: 139 [distribution].

Distribution. —Greece, Italy, Slovenia, Switzerland, Ukraine.

broweri Blickle, 1963: 18 [type locality: [United States], Maine, Allagash; INHS; ♂]. —Blickle 1979: 47, 71 [checklist; ♂]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 98 [♂; distribution]. —Etnier 2010: 485 [distribution]. —Bowles et al. 2020: 7 [distribution].

Distribution. —U.S.A.

bugata Wells, 1984: 267 [type locality: [Papua] New Guinea, NE., Bugu River, E. of Lae, 100 m; BPBM; ♂]. —Neboiss 1986: 62 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

bumbulensis Wells & Andersen, 1995: 161 [type locality: Tanzania, Tanga region, West Usambara Mts, Dule, Bumbuli River, 1220 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

buresschi Kumanski, 1972: 1261 [type locality: [Bulgaria], Balkangebirge, kleiner Bach, Nebenfluß des Iskār beim Dorf Bov; SOFM; ♂]. —Botosaneanu and Malicky 1978: 341 [possible synonym of *H. vichtaspa*].

Distribution. —Bulgaria.

caesariata Zhou & Yang in Zhou et al. 2009b: 355 [type locality: China, Guangxi Zhuang Autonomous Region, Shangsi City, Nalin He, tributary of Mingjiang He, 2.0 km NW of main entrance to Shiwandashan National Forest Park, 21°54'N 107°53'E, 281 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

calcara Wells, 1978: 753 [type locality: [Australia], New South Wales, MacLaughlin River, near Ando; NMV; ♂; ♀]. —Wells 1985b: 6 [case]. —Neboiss 1986: 63 [atlas; ♂; ♀].

Distribution. —Australia.

callia Denning, 1947a: 149 [type locality: [United States], North Carolina, Raleigh; ESUW; ♂]. —Morse and Blickle 1953: 72 [checklist]. —Etnier 1968: 191 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 47, 63 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Huryn and Foote 1983: 790 [distribution]. —Harris et al. 1984: 108 [distribution]. —Morse et al. 1989: 22 [distribution]. —Harris et al. 1991: 171 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Masteller and Flint 1992: 69 [checklist]. —Houghton et al. 2001: 504 [distribution]. —DeWalt and Heinold 2005: 41 [phenology; distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2017: 62 [checklist; as *calia*].

Distribution. —Canada, U.S.A.

calundoensis Marlier, 1965: 68 [type locality: [Angola] Moxico, Zambèze, Rives du Lac Calundo, Loc. 4647-17; MDLA; ♂]. —Wells and de Moor 2020: 512 [checklist].

Distribution. —Angola.

caminopa Mey, 1998a: 555 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

campanulata Morton, 1896: 103 [type locality: [Algeria]; NHMUK; ♂]. —Morton 1904: 324 [distribution]. —Schmid 1952: 650 [distribution; ♂]. —Kimmins 1957a: 107 [lectotype designation]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 46 [atlas; ♂]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —González et al. 1990: 214 [distribution]. —Malicky 1997: 142 [distribution; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 543 [checklist]. —González and Menéndez 2011: 118 [distribution]. —Martín et al. 2015: 75 [distribution]. —Ruiz-García et al. 2016: 4 [distribution].

Distribution. —Algeria, Morocco, Spain, Tunisia.

caperata Wells, 1984: 264 [type locality: [Papua] New Guinea, SE., Kokoda, 400 m; BPBM; ♂]. —Neboiss 1986: 64 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

carara Mey, 1998a: 557 [type locality: Costa Rica, San José, Reserva Biológica Carara, Quebrada Bonita, 9.775°N 84.605°W; NMNH; ♂].

Distribution. —Costa Rica.

carolae Holzenthal & Kelley, 1983: 466 [type locality: [United States], South Carolina, Aiken Co., Savannah River Plant, Upper Three Runs Creek at SRP road 8-1; NMNH; ♂].

Distribution. —U.S.A.

catamarcensis Flint, 1983: 45 [type locality: Argentina, Pcia. Catamarca, Arroyo El Pintado, near La Viña; NMNH; ♂; ♀]. —Angrisano 1999: 32 [checklist].

Distribution. —Argentina.

chattanooga Frazer & Harris, 1991b: 6 [type locality: [United States], Alabama, DeKalb County, West Fork of the Little River at Union covered bridge, near Cloudmont Resort (Sec. 9, T6S, R 10 E); NMNH; ♂]. —Frazer et al. 1991: 19 [distribution]. —Masteller and Flint 1992: 70 [distribution]. —Huryn and Harris 2000: 193 [distribution]. —DeWalt and Heinold 2005: 41 [phenology; distribution]. —Armitage et al. 2011: 14 [checklist].

Distribution. —U.S.A.

cheaha Harris, 1991: 14 [type locality: [United States], Alabama, Talladega County, Dry Creek at Co. Hwy. 234, Talladega National Forest, 4.8 km SW Waldo (Sec. 23, T 19 S, R 5 E); NMNH; ♂]. —Harris et al. 1991: 172 [distribution].

Distribution. —U.S.A.

chelops Harris, 1985a: 249 [type locality: [United States], Alabama, Choctaw County, unnamed spring along Hwy. 17, 4 miles SW Butler, T12N, R3W, S10; NMNH; ♂]. —Harris et al. 1991: 173 [distribution].

Distribution. —U.S.A.

chinensis Xue & Yang, 1990: 126 [type locality: [China] Wudalianchi, Heilongjiang; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Morse et al. 2001: 201 [distribution]. —Arefina et al. 2002: 97 [♂, ♀; distribution]. —Yang et al. 2005: 458 [checklist]. —Ito et al. 2011: 5 [♂; ♀; distribution]. —Ivanov 2011: 195 [checklist]. —Ito and Nagasaka 2014: 9 [distribution]. —Ito 2015: 8 [checklist]. —Tanida and Kuranishi 2016: 70 [checklist]. —Yang et al. 2016: 476 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution].

Distribution. —China, Japan, Russia.

cintrana Morton, 1904: 324 [type locality: Portugal, Cintra; depository not designated; ♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 46 [atlas; ♂]. —González et al. 1990: 214 [distribution]. —Malicky 1997: 142 [distribution; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 543 [checklist]. —González and Menéndez 2011: 118 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —Mabrouki et al. 2020: 12 [distribution].

Distribution. —Morocco, Portugal, Spain.

circangula Harris, 1985b: 606 [type locality: [United States], Alabama, Baldwin County, Pine Log Creek at Hwy. 59; NMNH; ♂]. —Harris et al. 1991: 175 [distribution]. —Pescador et al. 2004: 133 [distribution]. —Harris et al. 2012: 5 [checklist]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

cochlearis Xue & Yang, 1990: 127 [type locality: [China] Linxian Qihe, Henan; NAUJ; ♂]. —Xue et al. 1992: 353–356 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

cognata Mosely, 1930b: 245 [type locality: France, Pyrénées-Orientales, Quillan; NHMUK; ♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 49 [atlas; ♂]. —Malicky 1998b: 396 [♂; distribution]. —Cianficconi et al. 1999a: 57 [distribution]. —Valle 2001: 66 [distribution]. —Coppa and Tachet 2004: 124 [♀]. —Malicky 2002: 4 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 61 [atlas]. —Malicky 2005b: 543 [checklist]. —Coppa and Tachet 2005: 130 [♀]. —Cianficconi and Corallini 2010: 87 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Šemnički et al. 2011: 149 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Martín et al. 2015: 75 [distribution]. —Cianficconi et al. 2016: 139 [distribution].

Distribution. —Croatia, France, Italy, Slovenia, Spain.

consimilis Morton, 1905: 65 [type locality: [United States] “Ithaca New York and Belfrage Texas”; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Mosely 1923: 293 [scent-organ]. —Betten 1934: 158 [♂; distribution]. —Ross 1944: 153 [♂; ♀; larva; distribution]. —Denning 1947b: 174 [distribution]. —Ross and Spencer 1952: 47 [distribution]. —Etnier 1965: 147 [checklist]. —Unzicker et al. 1970: 172 [distribution]. —Edwards 1973: 506 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Etnier and Schuster 1979: 17 [checklist]. —Blickle 1979: 47, 67 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Swegman et al. 1981: 132 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Light and Adler 1983: 77 [distribution; biology]. —Hamilton et al. 1983: 18 [distribution]. —Lake 1984: 219 [distribution]. —Steven and Hilsenhoff 1984: 163 [distribution]. —Bowles and Mathis 1989: 238 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Harris et al. 1991: 176 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Masteller 1993: 134 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton and Stewart 1996: 98 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Ruiter 1999: 165 [distribution]. —Keiper and Foote 2000: 226 [distribution; biology]. —Houghton 2001: 89 [checklist]. —Houghton et al. 2001: 504 [distribution]. —Blinn and Ruiter 2005: 68 [distribution; biology]. —Zeullig et al. 2006: 42 [distribution]. —Bowles et al. 2007: 21 [distribution; biology]. —Houghton and Holzenthal 2010: 486 [distribution]. —Biondi 2010: 60 [distribution]. —Flint 2011: 104 [distribution].

—Houghton et al. 2011a: 388 [distribution; biology]. —Houghton et al. 2011b: 5 [distribution; biology]. —Houghton et al. 2011a: 388 [distribution; biology]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2013: 37 [distribution; biology]. —Blinn and Ruitter 2013: 291 [biology; distribution]. —Ruitter et al. 2013: 3 [distribution; DNA barcoding; larval-adult association]. —DeWalt et al. 2016: 51 [distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 62 [checklist]. —Mendez et al. 2019: 128 [checklist]. —Bowles et al. 2020: 7 [distribution].

Distribution. —Canada, U.S.A.

constricta Bueno-Soria, 1984: 99 [type locality: Mexico, Chiapas, La Prusia; NHMUK; ♂]. —Flint 1991b: 47 [♂; ♀; distribution]. —Flint and Reyes 1991: 484 [distribution]. —Harris and Holzenthal 1999: 34 [♂; distribution]. —Muñoz-Quesada 2000: 277 [checklist]. —Mey and Ospina-Torres 2018: 28 [♂; distribution].

Distribution. —Belize, Colombia, Costa Rica, Honduras, Mexico, Peru.

coreana Kumanski, 1990: 52 [type locality: Korea, Province Phyongan pukdo (Northern Phyongan), Myohyang Mts., the foothills, the hotel; SOFM; ♂]. —Arefina et al. 2002: 98 [distribution]. —Mey and Nozaki 2006: 24 [distribution]. —Ito et al. 2011: 18 [♂; ♀; distribution]. —Ivanov 2011: 195 [checklist]. —Ito 2015: 8 [checklist]. —Tanida and Kuranishi 2016: 70 [checklist]. —Kobayashi et al. 2017: 17 [distribution]. —Park and Kong 2020: 297 [checklist].

Distribution. —Japan, Korea, Russia.

cornea Yang & Xue, 1994: 10 [type locality: [China], Sichuan, Ping-wu county, 19 km E of Ping-wu, tributary of Fu-jiang River, 1090 m; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

cornuta Mosely, 1922: 179 [type locality: [England], “Britain”; NHMUK; ♂]. —Mosely 1923: 292 [scent-organ]. —Martynov 1934: 129 [♂]. —Racięcka 1936: 98 [distribution]. —Mosely 1939b: 262 [♂]. —Tjeder 1941: 10 [♀; distribution]. —Berg 1948: table 14 [distribution]. —Nybom 1960: 17 [checklist]. —Botosaneanu 1960: 148 [distribution]. —Kimmins 1961: 32 [comparison with *H. lotensis*; ♂; ♀]. —Botosaneanu 1967: 294 [distribution]. —Spuris 1972: 20 28 [checklist]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 46 52 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Wiberg-Larsen 1985: 40 [checklist]. —Kumanski 1985: 122 [♂]. —González et al. 1986: 113 [distribution]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Sipahiler and Malicky 1987: 129 [distribution]. —Rojas-Camousseight and Tachet 1988: 315 [♀]. —Spuris 1989: 15 [checklist]. —González et al. 1990: 212 [checklist]. —Andersen et al. 1993b: 3 [distribution]. —Bagge 1995: 94, 95 [distribution; biology]. —Maier et al. 1995: 147 [distribution]. —Malicky 1997: 142 [♂]. —Gullefors 2002: 138 [checklist]. —Gullefors 2003: 194 [distribution]. —Malicky 2004a: 57

[atlas]. —Malicky 2005b: 543 [checklist]. —Sipahiler 2005: 397 [distribution]. —Gullefors 2006: 137 [distribution]. —Sipahiler 2007: 38 [distribution]. —Robert 2007: 82 [checklist]. —Szczyński and Godunko 2008: 14 [checklist]. —Neu 2010: 149 150 [♀]. —Ivanov 2011: 195 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Kiss 2012: 28 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —O'Connor 2015: 28, 79 [distribution]. —O'Connor and O'Connor 2015: 203 [distribution]. —Cianficconi et al. 2016: 139 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 15, 20, 22, 23, 26, 48 [conservation status]. —O'Connor and O'Connor 2017b: 52 [distribution]. —Küçükbasmaci and Kiyak 2017: 488 [distribution]. —O'Connor and O'Connor 2018: 81 [distribution]. —Gullefors 2018: 108 [biology; distribution]. —O'Connor et al. 2018: 23 [distribution]. —Sipahiler 2018: 41 [distribution]. —O'Connor 2020: 140 [distribution].

Distribution. —Bulgaria, Denmark, England, Estonia, Finland, Germany, Hungary, Ireland, Italy, Lithuania, Norway, Poland, Russia, Spain, Sweden, Turkey, Ukraine.

cortensis Mosely, 1937a: 121 [type locality: [France], Corsica; NHMUK; ♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 42 [atlas; ♂]. —Malicky 2004a: 51 [atlas]. —Malicky 2005b: 536, 544 [checklist]. —Cianficconi et al. 2007a: 67 [proposed as Italian endemic]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 139 [distribution].

Distribution. —France, Italy.

coscaroni Flint, 1983: 46 [type locality: Argentina, Pcia. Salta, 5 km S Oran; NMNH; ♂]. —Angrisano 1999: 32 [checklist].

Distribution. —Argentina.

cottaquilla Harris, 1994: 284 [type locality: [United States], Alabama, Calhoun County, South Branch to Cane Creek on Fort McClellan Military Reservation, Area 15C, 3 miles northeast Anniston; NMNH; ♂].

—*setigera* Harris, 1986a: 610 [type locality: [United States], Alabama, Calhoun County, South Branch to Cane Creek on Fort McClellan Military Reservation, Area 15C, 3 miles northeast Anniston; NMNH; ♂; preoccupied by Wells, 1984: 270]. —Harris et al. 1991: 205 [distribution]. —Harris 1994: 284 [replaced].

Distribution. —U.S.A.

coweetensis Huryn, 1985: 444 [type locality: [United States], North Carolina, Macon County, Coweeta Hydrologic Laboratory, Experimental Watershed 27; NMNH; ♂; ♀; larva]. —Harris et al. 1991: 177 [distribution].

Distribution. —U.S.A.

crenata (Ulmer, 1951): 91 [type locality: [Indonesia], Java, Sarangan, quelliger Zufluß am See Pasir; ZMUH; ♂; in *Pasirotrichia*]. —Malicky 1998a: 797 [♂; distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 29 [atlas; ♂]. —Malicky et al. 2014a: 5 [distribution].

Distribution. —Indonesia.

cressae Thomson & Holzenthal, 2012: 23 [type locality: Venezuela, Bolívar, Gran Sabana, E. Pauji, “Río Curvita”, 04°31.237'N, 61°31.591'W, 869 m; UMSP; ♂].

Distribution. —Venezuela.

cretosa Harris, 1985b: 611 [type locality: [United States], Alabama, Greene County, Trussels Creek at Co. Hwy. 23; NMNH; ♂]. —Harris et al. 1991: 178 [distribution].

Distribution. —U.S.A.

criokera Harris, Rasmussen, & Denson, 2012: 2 [type locality: [United States], Florida, Liberty County, Gregory Mill Creek at CR-379, Apalachicola National Forest, N30°10'26", W85°00'48"; NMNH; ♂].

Distribution. —U.S.A.

cruciata Ulmer, 1912b: 83 [type locality: [Tanzania], Deutsch-Ostafrika, Langenburg; ZMHB; ♂]. —Mosely 1934a: 149 [illustration of scent-organ]. —Johanson 1992: 118 [checklist]. —Wells and Andersen 1995: 160 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution]. —Malicky 1999a: 344 [distribution]. —Malicky 1999b: 492 [distribution]. —de Moor et al. 2000: 112 [distribution]. —Botosaneanu 2002a: 323 [discussion of male genitalia; ♂; distribution]. —Malicky 2004a: 62 [atlas]. —Malicky 2005b: 544 [checklist]. —de Moor 2007: 216 [distribution]. —Johanson and Mary 2009: 7 [distribution]. —Mey 2011: 343, 345 [distribution; checklist]. —de Moor 2011: 354 [distribution]. —Malicky 2015: 43 [checklist]. —Mey 2016: 305, 307 [distribution]. —Englmaier et al. 2020: 10 [distribution]. —Mey and de Moor 2019: 137, 139 [checklist; distribution]. —de Moor and Bellingan 2019: 157 [distribution]. —Wells and de Moor 2020: 500 [♂; distribution].

—***capensis*** Barnard, 1934: 391 [type locality: [South Africa]; holotype not designated; depository not designated; ♂; ♀; larva; pupa]. —Scott 1963: 475 [distribution]. —Jacquemart 1963a: 405 [distribution]. —Botosaneanu 2002a: 323 [to synonymy].

—***hirra*** Mosely, 1948b: 81 [type locality: [Yemen], Western Aden Protectorate, Wadi Dareija, near Dhala, c. 4600 ft; NHMUK; ♂]. —Botosaneanu and Gasith 1971: 99 [distribution]. —Botosaneanu 1973: 66 [♂]. —Botosaneanu and Giudicelli 1981: 21 [larva; biology; distribution]. —Botosaneanu 1982b: 11 [habitat threat]. —Malicky 1983a: 106 [to synonymy; distribution]. —Malicky 1983b: 50, 52 [atlas; ♂; ♀]. —Gibon 1987a: 125 [distribution]. —Botosaneanu 1992: 78 [head; ♂; ♀]. —Malicky 1999a: 344 [distribution].

—***airensis*** Jacquemart, 1980b: 2 [type locality: [Niger], Guelta de Timia; IRSNB; ♂]. —Malicky 1983a: 106 [to synonymy; distribution].

Distribution. —Angola, Benin, Cabo Verde, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Israel, Madagascar, Namibia, Niger, South Africa, Tanzania, Togo, the Comoros, Yemen.

cubana Kumanski, 1987: 30 [type locality: Cuba, Province Las Villas, the massive of Guamuaya, Rio Nabujina near El Piojillo village; SOFM; ♂; ♀]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 83 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

—***pseudomeralda*** Botosaneanu, 1979: 51 [*nomen nudum*, attributed to Sykora]. —Kumanski 1987: 30 [to synonymy].

Distribution. —Cuba.

cuembica Wells & de Moor, 2020: 498 [type locality: Angola, Moxico Province, Cuando River, Site 6 — Cuando campsite bridge, -13.5265, 19.27921; AMGS; ♂].

Distribution. —Angola.

cuneata Wells & Dudgeon, 1990: 169 [type locality: Hong Kong, Tai Po Kao Forest stream; NHMUK; ♂]. —Harris and Holzenthal 1999: 38 [♂; distribution]. —Yang et al. 2016: 476 [checklist].

Distribution. —Hong Kong.

curvata Bueno-Soria, 1984: 123 [type locality: Honduras, El Zamorano; NMNH; ♂].

Distribution. —Costa Rica, Honduras.

dampf Ulmer, 1929: 264 [type locality: [Germany]; depository not designated; ♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Andrikovics and Ujhelyi 1983: 6 [distribution]. —Malicky 1983b: 43 [atlas; ♂]. —Nógrádi 1986: 137 [distribution; ♀]. —Spuris 1989: 15 [checklist]. —Xue and Yang 1991: 21 [distribution]. —Xue et al. 1992: 353–356 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Czachorowski 1995: 279 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Graf et al. 1998: 206 [distribution]. —Malicky 1999f: 31 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Turunen 1999: 2 [distribution]. —Uherkovich and Nógrádi 2001: 95 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Malicky 2002: 4 [distribution]. —Malicky 2004a: 52 [atlas]. —Malicky 2005a: 60 [distribution]. —Yang et al. 2005: 458 [checklist]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Robert 2007: 82 [checklist]. —Bochert 2007: 119 [distribution; biology; ♂]. —Ito et al. 2011: 11 [♂ ♀; distribution]. —Ivanov 2011: 195 [checklist]. —Ito 2015: 8 [checklist]. —Vshivkova et al. 2016: 78, 79 [distribution]. —Yang et al. 2016: 476 [checklist]. —Tanida and Kuranishi 2016: 70 [checklist]. —Graf and Leitner 2016: 37 [distribution]. —Graf et al. 2017: 48 [distribution]. —Kobayashi et al. 2017: 17 [distribution]. —Park et al. 2018: 102 [♂; ♀; distribution]. —Park and Kong 2020: 297 [checklist].

—**itoi** Kobayashi 1977: 5 [type locality: [Japan] Utonai Pond Utonai Tomakomai-shi Hokkaido; depository not designated; ♂; ♀]. —Ito and Kawamura 1980: 113 [larva; pupa; case; biology]. —Ito et al. 1993: 142 [checklist]. —Morse et al. 2001: 102 [distribution]. —Arefina 2002: 8 [distribution]. —Tanida et al. 2005: 442 [larva; ♂]. —Ivanov 2011: 195 [checklist]. —Ito et al. 2011: 11 [to synonymy]. —Potikha and Vshivkova 2016: 364 [distribution].

—**ezoensis** (Kobayashi, 1977): 5 [type locality: [Japan], Utonai Pond, Utonai, Tomakomai-shi, Hokkaido; depository not designated; ♂; in *Oxyethira*]. —Ito and Kawamura 1984: 315 [as synonym of *H. itoi*]. —Tanida and Kuranishi 2016: 70 [as synonym of *H. dampfi*]. —Ito and Oláh 2017: 24 [to synonymy].

—**volgensis** Kachalova & Muhametsina, 1979: 82 [type locality: [Russia, Volga delta]; type depository not given; ♂; larva]. —Spuris 1989: 16 [checklist]. —Malicky 1999f: 32 [to synonymy]. —Malicky 2005b: 544 [checklist].

Distribution. —Austria, China, Finland, France, Germany, Greece, Hungary, Japan, Poland, South Korea, Russia, Switzerland.

dandik Oláh & Johanson, 2010a: 14 [type locality: Malaysia, Sabah, Tawau, Maliau Basin, Nepenthes Camp, Camel Trophy Hut, 4°43'59.3"N 116°52'39.7"E, 999 m; NHRS; ♂].

Distribution. —Malaysia.

danieli Harris & Armitage in Armitage et al. 2011: 30 [type locality: [United States], Ohio, Erie County, Margaretta Twp., Resthaven Wildlife Area, N41.4067, W82.81813; NMNH; ♂].

Distribution. —U.S.A.

darda Oláh, 2016: 110 [type locality: Philippines, Negros Patag NR, 750 m; Collection Oláh; ♂].

Distribution. —Philippines.

daun Wells & Huisman, 1992: 103 [type locality: East Malaysia, Sabah, Bundu Tuhan, Sg. Laidan, 05°58'N 116°31'E, 950 m; RMNH; ♂]. —Malicky 2010a: 31 [atlas; ♂].

Distribution. —Malaysia.

dayung Wells & Huisman, 1992: 105 [type locality: East Malaysia, Sabah, 60 km W Lahad Datu, DVFC, confluence Sg. Segama - Sg. Palum Tambun, 04°58'N 117°48'E, 150 m; RMNH; ♂]. —Malicky and Chantaramongkol 2007: 1024 [♂; distribution]. —Malicky 2010a: 33 [atlas; ♂]. —Malicky 2014a: 1622 [checklist]. —Malicky et al. 2016: 92 [distribution]. —Yang et al. 2016: 476 [checklist].

Distribution. —Indonesia, Malaysia, Taiwan, Thailand, Vietnam.

decia Etnier & Way, 1973: 425 [type locality: [United States], Ten-mile creek at bridge 0.5 air miles south of Kingston Pike (U.S. Highway 11 and 70), near Ebenezer Road, Knox Co., Tenn.; NMNH; ♂]. —Blickle 1979: 48, 69 [checklist; ♂]. —Etnier and Schuster 1979: 17 [checklist].

—**chocolocco** Harris, 1985b: 609 [type locality: [United States], Alabama, Calhoun County, Chocolocco Creek, unmarked county road, 1.5 miles east Jenkins; NMNH; ♂]. —Harris et al. 1991: 174 [distribution]. —Harris and Etnier 1994: 262 [to synonymy].

Distribution. —U.S.A.

dejaloni Botosaneanu, 1980: 166 [type locality: central Spain, Rio Jarama; ZMUA; ♂]. —Malicky 1983b: 43 [atlas; ♂]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Malicky 2004a: 52 [atlas]. —Malicky 2005b: 544 [checklist]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Portugal, Spain.

delineata Morton, 1905: 6 [type locality: [United States], Ithaca, New York; depository not designated; ♂; as *delineatus*]. —Banks 1907a: 50 [catalogue]. —Mosely 1923: 293 [scent-organ]. —Sibley 1926: 205 [biology]. —Betten 1934: 158 [♂; distribution]. —Etnier 1968: 191 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Etnier and Schuster 1979: 17 [distribution]. —Blickle 1979: 48, 65 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Harris et al. 1984: 108 [distribution]. —Usis and Foote 1989: 84 [distribution]. —Bowles

and Mathis 1989: 238 [distribution]. —Tarter 1990: 239 [checklist]. —Harris et al. 1991: 179 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Floyd et al. 1993: 90 [phenology; distribution]. —Moulton and Stewart 1996: 99 [♂; distribution]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 504 [distribution]. —DeWalt and Heinold 2005: 41 [phenology; distribution]. —Biondi 2010: 61 [distribution]. —Flint 2011: 104 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2017: 62 [checklist].

Distribution. —Canada, U.S.A.

dentata Ross, 1938a: 126 [type locality: [United States], Virginia, Luray; INHS; ♂]. —Blickle 1979: 48, 67 [checklist; ♂]. —Parker and Voshell 1981: 4 [distribution]. —Masteller and Flint 1992: 70 [distribution]. —Myers et al. 2011: 106 [distribution].

Distribution. —U.S.A.

dentina Mey, 1998a: 557 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

denza Ross, 1948: 204 [type locality: Mexico, Tamaulipas, Hacienda Santa Engracia; INHS; ♂]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Blickle 1979: 48, 71 [checklist; ♂]. —Waltz and McCafferty 1983b: 354 [distribution]. —Waltz and McCafferty 1983c: 414 [distribution]. —Bueno-Soria 1984: 114 [♂; distribution]. —Holzenthal 1988: 61 [distribution]. —Harris and Holzenthal 1999: 49 [head]. —Maes 1999: 1193 [checklist]. —Chamorro-Lacayo et al. 2007: 42 [checklist].

Distribution. —Costa Rica, Mexico, Nicaragua, U.S.A.

desertorum Mey, 1993: 336 [type locality: China, Xinjiang, Kashi (=Kaschgar), Teichabfluß am Kaschgar-Fluß (39.29/75.59); ZMHB; ♂]. —Yang et al. 2005: 458 [checklist]. —Huang et al. 2005: 469 [distribution]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

disgalera Holzenthal & Kelley, 1983: 466 [type locality: [United States], South Carolina, Aiken Co., Savannah River Plant, Upper Three Runs Creek at SRP road 8-1; NMNH; ♂]. —Harris et al. 1991: 180 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 6 [checklist]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

ditalea Flint, 1968b: 46 [type locality: Jamaica, St. Andrew, Fresh River, Ferry; NMNH; ♂; ♀]. —Flint 1968b: 82 [checklist]. —Bueno-Soria 1984: 119 [♂; distribution]. —Flint and Reyes 1991: 484 [distribution]. —Botosaneanu 1995a: 27 [distribution]. —Botosaneanu and Hyslop 1998: 16 [distribution]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 83 [checklist]. —Flint and Sykora 2004: 31 [distribution]. —Pérez-Gelabert 2008: 300 [checklist]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Dominican Republic, Ecuador, Jamaica, Mexico, Peru.

dominicana Botosaneanu, 1995a: 27 [type locality: Dominican Republic, La Descubierta, north shore Lago Enriquillo, south from Sierra de Neiba; ZMUA; ♂; ♀]. —Botosaneanu 2002b: 83 [checklist]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Flint and Sykora 2004: 31 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Cuba, Dominican Republic.

dorcas Mey, 1998a: 557 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuaganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

dorsoprocessuata Botosaneanu, 1993a: 186 [type locality: [Russia], South Siberia, Tchitinskaia Oblasti (east from Tchita), at Ukurei - a village situated on Kuenga, a tributary of Shilka River (basin of Argun River); ZIN; ♂]. —Botosaneanu 1993c: 247 [addenda]. —Arefina 2004: 211 [distribution]. —Ivanov 2011: 195 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Ito and Shimura 2019: 27 [♂; ♀; distribution].

Distribution. —Japan, Russia.

dumoga Oláh, 2016: 112 [type locality: [Indonesia], Dumoga-Bone N. P. Sulawesi; “specimens were not available; species description is based on the published drawings”; ♂].

Distribution. —Indonesia.

ebroensis Harris, Rasmussen, & Denson, 2012: 4 [type locality: [United States], Florida, Bay Co., Little Crooked Creek at SR-79, 1.5 mi S Ebro, Pine Log State Forest, N30°24'48", W85°52'04"; NMNH; ♂].

Distribution. —U.S.A.

eglinensis Harris, 2002: 49 [type locality: [United States], Florida, Okaloosa County, Rogue Creek, 0.6 km S Base Rd. 232, Eglin Air Force Base, 30°33'19"N, 86°34'51"W; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 6 [checklist].

Distribution. —U.S.A.

eileithya Malicky, 1999a: 345 [type locality: [Yemen], Provinz Al-Mahwit, 30 km NE Bajil, 5 km NNE Khamis Bani Sa'd, 750 m, 15°11'N, 43°32'E; Collection Malicky; ♂]. —Malicky 2004a: 55 [atlas]. —Malicky 2005b: 544 [checklist].

Distribution. —Yemen.

elongata (Ulmer, 1951): 86 [type locality: [Indonesia], Java, Kali Tjiwalen bei Tjibodas, ca. 1370 m; ZMUH; ♂; in *Oeceotrichia*]. —Malicky 1998a: 797 [♂; distribution]. —Malicky 2010a: 29 [atlas; ♂]. —Malicky et al. 2014a: 5 [distribution].

Distribution. —Indonesia.

englishi Hamilton in Morse et. al 1989: 26 [type locality: [United States], South Carolina, Oconee County, Thompson River at North Carolina border, about 1,440 ft [439 m], Duke Power Company locality #583.2; NMNH; ♂].

Distribution. —U.S.A.

engywuck Malicky & Lounaci, 1987: 6 [type locality: [Tunisia], Oued Titria (5 km E Ain Sobah); depository not designated; ♂]. —Malicky 1997: 143 [distribution; ♂]. —Malicky 2004a: 58 [atlas]. —Malicky 2005b: 544 [checklist]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Spain, Tunisia.

eramosa Harper, 1973: 393 [type locality: [Canada], Eramosa River at Cedar Valley, Wellington County, Ontario; QMOR; ♂]. —Blickle 1979: 48, 67 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist].

Distribution. —Canada, U.S.A.

erawan Malicky & Chantaramongkol, 2007: 1018 [type locality: Thailand, Prov. Kanchanaburi, Erawan NP, 14°22'N 99°08'E, 200 m; Collection Malicky; ♂]. —Malicky 2010a: 25 [atlas; ♂].

Distribution. —Thailand.

erkakanae Sipahiler, 1997: 15 [type locality: Turkey, Ankara, Beypazari, Urus, Kirmir Çayı; depository not designated; ♂]. —Malicky 2004a: 56 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution].

Distribution. —Turkey.

ernstreichli Malicky, 1998b: 395 [type locality: [Uzbekistan], Turapsaj, 1500–1700 m, 38°32'N, 67°31'E; Collection Malicky; ♂]. —Malicky 2004a: 62 [atlas]. —Malicky 2005b: 544 [checklist].

Distribution. —Uzbekistan.

explicata Wells, 1984: 264 [type locality: [Papua] New Guinea, SE., Kokoda, 400 m; BPBM; ♂]. —Wells 1990b: 382 [as junior synonym of *H. obscura*]. —Neboiss 1986: 61 [atlas; ♂]. —Oláh 2016: 111 [diagnosed as distinct species; ♂]. —Oláh and Kovács 2018: 179 [distribution].

Distribution. —Indonesia, Papua New Guinea.

extrema Kumanski, 1990: 50 [type locality: Korea, Province Phyongan pukdo (Northern Phyongan) Myohyang Mts., the foothills, the hotel; SOFM; ♂; ♀]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist]. —Park and Kong 2020: 297 [checklist].

Distribution. —Korea.

felfela Oláh & Johanson, 2011: 119 [type locality: Mexico, State of Veracruz, Los Manantiales, Tlilapan, 18°47.944'N 097°06.270'W, 1171 m; NHRS; ♂].

Distribution. —Mexico.

florii Malicky & Moretti, 1987: 193 [type locality: [Italy], Sardinien, Domusdemaria; depository not designated; ♂]. —Malicky 2004a: 53 [atlas]. —Malicky 2005b: 544 [checklist]. —Cianficconi et al. 2007a: 67 [proposed as Italian endemic]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 139 [distribution].

Distribution. —Italy.

fiskei Blickle, 1963: 19 [type locality: [United States], Maine, Dennistown; INHS; ♂]. —Blickle 1979: 48, 63 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Morse et al. 1989: 22 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —DeWalt and Heinold 2005: 41 [phenology; distribution]. —Myers et al. 2011: 106 [distribution]. —Houghton 2020: 2 [distribution].

Distribution. —U.S.A.

flinti Bueno-Soria, 1984: 107 [type locality: Costa Rica, Turrialba; NMNH; ♂]. —Holzenthal 1988: 61 [distribution]. —Harris and Holzenthal 1999: 38 [♂; distribution]. —Armitage et al. 2015b: 5 [distribution]. —Armitage et al. 2015a:

6 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Costa Rica, Panama.

florestani de Souza, Santos, & Takiya, 2014b: 640 [type locality: Brazil, Piauí, Parque Nacional de Sete Cidades, Riacho Piedade, 04°06'34"S 41°43'39"W, 169 m; CZMA; ♂].

Distribution. —Brazil.

fonsorontina Botosaneanu & Moubayed in Moubayed and Botosaneanu 1985: 64 [type locality: [Lebanon], Liban, Hermel, l'Oronte en aval de la source Zarka - une source principale de cette rivière, 650 m; ZMUA; ♂; ♀]. —Botosaneanu 1992: 73 [♂; ♀]. —Malicky 2004a: 61 [atlas; as *fonsorentina*]. —Malicky 2005b: 544 [checklist; as *fonsorentina*]. —Dia 2015: 51 [distribution].

Distribution. —Lebanon.

forcipata (Eaton, 1873): 135 [type locality: [England], Oakamoor, Staffordshire, and the River Dove, near Norbury and Ashbourne, Derbyshire; NHMUK; ♂; in *Phrixocoma*]. —McLachlan 1880: 513 [revision; ♂; ♀]. —Morton 1899a: 54 [distribution]. —Morton 1899b: 281 [distribution]. —Klapálek 1900b: 3 [distribution]. —Martynov 1913b: 11 [♂]. —Mosely 1919a: 395 [scent-organ]. —Martynov 1924: 44 [♂]. —Tjeder 1930b: 201 [distribution]. —Martynov 1934: 137 [♂]. —Mosely 1939b: 270 [♂]. —Kimmins 1943: 154 [distribution]. —Kimmins 1957a: 109 [lectotype designation]. —Nybom 1960: 18 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Spuris 1972: 21, 27, 28, 30 [checklist]. —Fahy 1972: 202 [distribution]. —Malicky 1974: 122 [checklist]. —Szczyński 1975: 41 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 12 [♂; distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 45, 52 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 137 [♂]. —Wiberg-Larsen 1985: 40 [checklist]. —Nógrádi 1986: 137 [distribution; ♀]. —Sipahiler and Malicky 1987: 84, 136 [♂; distribution]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Cooter 1987: 148 [distribution]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Spuris 1989: 16 [checklist]. —Krušnik 1991: 13 [distribution]. —Andersen et al. 1993b: 3 [distribution]. —Andersen et al. 1993a: 51 [distribution]. —Bagge 1995: 93 [distribution; biology]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Nógrádi and Uherkovich 1998: 338 [distribution]. —Peissner and Kappus 1998: 162 [distribution]. —Malicky 1999c: 96 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Cianficconi et al. 1999a: 57 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Graf and Hutter 2004: 147 [distribution]. —Graf et al. 2005: 55 [distribution]. —Gullefors 2005a: 119 [distribution]. —Sipahiler 2005: 397 [distribution]. —Uherkovich and Nógrádi 2001: 95 [distribution]. —Gullefors 2002: 138 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Malicky 2004a: 54, 64 [atlas]. —Malicky 2005a: 60

[distribution]. —Malicky 2005b: 544 [checklist]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Wiggers et al. 2006: 54 [distribution]. —Mey 2006a: 159 [distribution]. —Chvojka and Komzák 2006: 358 [distribution]. —Schiess-Bühler and Rezbanyai-Reser 2006: 72 [distribution]. —Ivanov and Melnitsky 2007: 32 [distribution]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Sipahiler 2007: 38 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Szczęsny and Godunko 2008: 15 [checklist]. —Flint and Thomas 2008: 40 [distribution]. —Višinskienė 2009: 27 [checklist]. —Hohmann 2010: 40 [distribution]. —Ivanov 2011: 195 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Viidalepp et al. 2011: 196 [distribution]. —Komzák and Chvojka 2012: 719 [distribution]. —Wolf et al. 2012: 75 [distribution]. —Andersen and Hagenlund 2012: 135 [distribution]. —Ibrahimi et al. 2012: 76 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Corallini et al. 2013b: 26 [distribution]. —O'Connor 2013: 64 [distribution]. —O'Connor and O'Connor 2014: 273 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —O'Connor and O'Connor 2015: 203 [distribution]. —Stanić-Kroštroman et al. 2015: 85 [distribution]. —Stanić-Kroštroman et al. 2015: 85 [distribution]. —O'Connor 2015: 28, 80 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution]. —Cianficconi et al. 2016: 139 [distribution]. —Pan'kov and Krasheninnikov 2016: 333 [distribution]. —Küttner et al. 2016: 179 [distribution]. —Sipahiler 2016: 15 [checklist]. —Gullefors 2016: 155 [checklist]. —O'Connor and O'Connor 2017b: 53 [distribution]. —O'Connor and O'Connor 2018: 81 [distribution]. —Lock and van Butsel 2018: 3 [distribution]. —Kučinić et al. 2019: 450 [distribution]. —Cerjanec et al. 2020: 13 [distribution]. —Kročá and Komzák 2020: 147 [distribution]. —O'Connor 2020: 140 [distribution]. —Navara et al. 2020: 46 [distribution].

Distribution. —Austria, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Republic of Kosovo, Serbia, Romania, Russia, Scotland, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine.

fortunata Morton, 1893: 76 [type locality: [Spain, Canary Islands]; NHMUK; ♂]. —Nybom 1948: 5 [distribution; transferred to *Hydropneuma*; *H. juba* considered junior synonym]. —Nybom 1954: 2 [distribution; in *Hydropneuma*]. —Kimmins 1957a: 107 [lectotype designation]. —Nybom 1963: 114 [distribution]. —Nybom 1965: 89 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1981a: 183 [♂]. —Malicky 1983b: 44 [atlas; ♂]. —Botosaneanu and Dumont 1987: 115 [♂]. —Malicky 1988a: 23 [considered species distinct from *H. juba*]. —Botosaneanu 1993b: 160 [distribution]. —Botosaneanu 2003: 107 [considered distinct from *H. juba*; *H. espada* considered junior synonym]. —Malicky 2004a: 53 [atlas]. —Malicky 2005b: 544 [checklist]. —Hughes 2006: 29 [biology].

Distribution. —Portugal, Spain.

fowlesi Harris & Sykora, 1996: 19 [type locality: [United States], West Virginia, Lewis County, Right Fork of the West Fork River, Walkersville; CMNH; ♂]. —Armitage et al. 2011: 14 [checklist].

Distribution. —U.S.A.

friedeli Malicky, 1972: 31 [type locality: [Turkey], Asia minor, 20 km westlich von Kizilcahamam, 1400 m; Collection Malicky; ♂]. —Malicky 1983b: 47 [atlas; ♂]. —Sipahiler and Malicky 1987: 122 [distribution]. —Malicky 1997: 143 [♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution; as *friedli*]. —Sipahiler 2007: 38 [distribution].

Distribution. —Turkey

fuentaldeala Schmid, 1952: 650 [type locality: Spain; CNC; ♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 42 [atlas; ♂]. —González et al. 1986: 113 [distribution]. —González et al. 1990: 212 [checklist]. —Malicky 2004a: 51 [atlas]. —Malicky 2005b: 544 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Martín et al. 2014: 72 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —Lonsdale 2020: 34 [holotype depository].

Distribution. —Portugal, Spain.

fuentelarbola Schmid, 1952: 651 [type locality: Spain; CNC; ♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 48 [atlas; ♂]. —Malicky 2004a: 60 [atlas]. —Malicky 2005b: 544 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —Spain.

furcata (Martynov, 1935): 114 [type locality: [India], above Kapildhara Fall, Rewah State, C. I.; NZSI; ♂; in *Oxydroptila*]. —Schmid 1958b: 66 [♂; distribution].

Distribution. —India, Sri Lanka.

furcilla Yang & Xue, 1994: 10 [type locality: [China], Anhui, Jin-xian, Song-cun, Ding-xi River, 33 km E of Jin-xian, 120 m; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

furcula Wells, 1984: 269 [type locality: [Papua] New Guinea, SE., Kokoda, 400 m; BPBM; ♂]. —Wells 1991: 501 [distribution].

Distribution. —Papua New Guinea.

furtiva Bueno-Soria, 1984: 104 [type locality: Mexico, Oaxaca, Puerta de Uxpanapa; CNIN; ♂]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Mexico.

fuscina Harris, 1985b: 611 [type locality: [United States], Alabama, Tuscaloosa County, Turkey Creek at Hwy. 69; NMNH; ♂]. —Harris et al. 1991: 181 [distribution].

Distribution. —U.S.A.

gandhara Schmid, 1960: 94 [type locality: [Pakistan] Himalaya, Naran; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*]. —Malicky 1983b:

48 [atlas; ♂]. —Malicky 2004a: 62 [atlas]. —Malicky 2005b: 544 [checklist]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —Pakistan.

gapdoi Oláh, 1989: 283 [type locality: Vietnam, Tamdao, 200 m a.s.l.; HNHM; ♂]. —Wells and Malicky 1997: 183 [distribution]. —Armitage et al. 2005: 27 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 14 [distribution]. —Malicky 2010a: 30 [atlas; ♂]. —Yang et al. 2016: 476 [checklist].

—*acrodonta* Xue & Yang, 1990: 126 [type locality: [China], Bawangling (320 m), Hainan; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Wells and Malicky 1997: 183 [to synonymy]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [as synonym]. —Malicky 2013: 42 [as synonym].

Distribution. —China, India, Indonesia, Thailand, Vietnam.

gaya Oláh, 1989: 278 [type locality: Vietnam, Tamdao, 200 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [♂; distribution]. —Malicky 2010a: 32 [atlas; ♂].

Distribution. —Thailand, Vietnam.

geniel Malicky, 2014a: 1610 [type locality: Taiwan, Prov. Pingtung, Huang-Lion, Forest recr. area; Collection Malicky; ♂].

Distribution. —Taiwan.

giama Oláh, 1989: 285 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Mey 2005a: 280 [distribution]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Oláh and Johanson 2010a: 15 [distribution]. —Malicky 2010a: 33 [atlas; ♂]. —Yang et al. 2016: 476 [checklist]. —Park and Kong 2020: 297 [checklist].

—*hubenovi* Kumanski, 1990: 54 [type locality: Korea, Province Kangwon, Kumgang Mts., the foothills near the hotel Go-sung and Ondžong vill.; SOFM; ♂; ♀]. —Malicky 2013: 42 [to synonymy].

Distribution. —China, Korea, Laos, Vietnam.

gingoog Wells & Mey, 2002: 128 [type locality: [Philippines] Mindanao, Misamis Or., Dinawihan, Gingoog, 26 km E of Gingoog City, 100–300 m; BPBM; ♂].

Distribution. —Philippines.

giudicellorum Botosaneanu, 1980: 167 [type locality: France, Provence, le complexe de sources et de ruisselets de 1' "Etang du Comte", à ca. 8 km N de St. Martin de Crau; ZMUA; ♂]. —Botosaneanu 1982b: 31 [habitat threat]. —González and Otero 1983: 118 [distribution]. —Malicky 1983b: 43 [atlas; ♂]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Cianficconi et al. 1999b: 278 [distribution]. —Valle 2001: 66 [distribution]. —Botosaneanu and Giudicelli 2004: 15 [♀; distribution]. —Malicky 2004a: 52 [atlas]. —Malicky 2005b: 544 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 140 [distribution].

Distribution. —France, Italy, Portugal, Spain.

grandiosa Ross, 1938a: 126 [type locality: [United States], Illinois, Oakwood, along Salt Fork River; INHS; ♂]. —Ross 1944: 151 [♂; ♀; larva; distribution]. —Denning 1947b: 174 [distribution]. —Etnier 1965: 147 [distribution]. —Unzicker et al. 1970: 172 [distribution]. —Edwards 1973: 506 [distribution]. —Blickle 1979: 48, 67 [checklist; ♂]. —Parker and Voshell 1981: 4 [distribution]. —Harris et al. 1982a: 510 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Steven and Hilsenhoff 1984: 163 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Tarter 1990: 239 [distribution]. —Harris et al. 1991: 182 [distribution]. —Floyd 1992: 50 [distribution]. —Masteller and Flint 1992: 70 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 99 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton et al. 2001: 504 [distribution]. —DeWalt and Heinold 2005: 41 [phenology; distribution]. —Biondi 2010: 61 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2011b: 5 [phenology; habitat; distribution]. —Wright et al. 2013: 466 [biology; distribution]. —DeWalt et al. 2016: 51 [distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 62 [checklist]. —Bowles et al. 2020: 7 [distribution].

Distribution. —U.S.A.

grenadensis Flint, 1968a: 58 [type locality: Grenada, 2 mi W Grand Etang; NMNH; ♂; ♀]. —Flint and Reyes 1991: 484 [distribution]. —Flint and Sykora 1993: 57 [distribution]. —Flint 1996b: 97 [distribution]. —Harris and Holzenthal 1999: 27 [♂]. —Maes 1999: 1193 [checklist]. —Muñoz-Quesada 2000: 277 [checklist]. —Botosaneanu 2002b: 83 [checklist]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Oláh and Johanson 2011: 120 [distribution]. —Armitage et al. 2015a: 6 [checklist]. —Ríos-Touma et al. 2017: 10 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

—***acutissima*** Botosaneanu in Botosaneanu and Alkins-Koo 1993: 24 [type locality: Trinidad, upper course of River Guanapo (3rd order and upper part of 4th order stream); ZUA; ♂; ♀]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Flint 1996b: 97 [to synonymy].

Distribution. —Colombia, Ecuador, Grenada, Nicaragua, Panama, Peru, Tobago, Trinidad, Venezuela.

grucheti Marlier & Marlier, 1982: 12 [type locality: La Réunion, Station 53, Rivière Langevin, à la lumière; IRSNB; ♂; ♀; larva]. —Botosaneanu 2002a: 326 [♂].

Distribution. —Réunion.

gunda Milne, 1936: 76 [type locality: [United States], Virginia, Falls Church; MCZ; ♂]. —Morse and Blickle 1953: 72 [checklist]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 48, 67 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Harris et al. 1982a: 510 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Harris et al. 1984: 108 [distribution]. —Morse et al. 1989: 22 [distribution]. —Usis and Foote 1989: 84 [distribution]. —Floyd and

- Schuster 1990: 130, 132 [distribution]. —Harris et al. 1991: 183 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Floyd and Morse 1993: 177 [distribution]. —Floyd et al. 1997: 136 [distribution]. —Huryn and Harris 2000: 193 [distribution]. —Flint 2011: 104 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Harris et al. 2012: 6 [distribution]. —Denson et al. 2016: 5 [distribution].
- dodgei* Denning, 1947a: 19 [type locality: [United States], Georgia, Macon; ESUW; ♂]. —Blickle 1979: 48 [to synonymy].
- Distribution.** —Canada, U.S.A.
- gurdi* Wells, 1990b: 379 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Tumpah R. and tributary junction; NMV; ♂; ♀; case]. —Malicky et al. 2010: 163 [distribution].
- Distribution.** —Indonesia.
- halus* Wells & Huisman, 1992: 104 [type locality: East Malaysia, Sabah, Bundu Tuhan, Sg. Laidan, 05°58'N 116°31'E, 950 m; RMNH; ♂]. —Malicky 2010a: 34 [atlas; ♂].
- Distribution.** —East Malaysia.
- hamata* Morton, 1905: 67 [type locality: [United States], New York, Ithaca; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Mosely 1923: 293 [scent-organ]. —Betten 1934: 159 [distribution]. —Ross 1944: 149 [♂; larva; distribution]. —Denning 1947b: 173 [distribution]. —Morse and Blickle 1953: 72 [checklist]. —Etnier 1965: 147 [checklist]. —Edwards 1973: 506 [distribution]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Resh et al. 1978: 383 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Etnier and Schuster 1979: 17 [distribution]. —Blickle 1979: 48, 63 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1982a: 510 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Harris et al. 1984: 108 [distribution]. —Bueno-Soria 1984: 89 [distribution]. —Steven and Hilsenhoff 1984: 163 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Morse et al. 1989: 22 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Tarter 1990: 239 [checklist]. —Harris et al. 1991: 184 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 99 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Floyd et al. 1997: 136 [distribution]. USA —Huryn and Harris 2000: 193 [distribution]. —Houghton 2001: 90 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Blinn and Ruiter 2005: 68 [biology; distribution]. —DeWalt and Heinold 2005: 42 [phenology; distribution]. —Blinn and Ruiter 2006: 332 [biology; distribution]. —Zeullig et al. 2006: 43 [distribution]. —Bowles et al. 2007: 21 [distribution; biology]. —Bueno-Soria et al. 2007: 33

[distribution]. —Blinn and Ruiter 2009a: 303 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Houghton et al. 2011b: 5 [biology; distribution]. —Myers et al. 2011: 106 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Harris et al. 2012: 6 [checklist]. —Blinn and Ruiter 2013: 280, 291 [biology; distribution]. —Denson et al. 2016: 5 [distribution]. —Houghton et al. 2017: 62 [checklist]. —Mendez et al. 2019: 118 [checklist]. —Bowles et al. 2020: 7 [distribution].

Distribution. —Canada, Mexico, U.S.A.

hamiltoni Harris, 2002: 54 [type locality: [United States], Florida, Okaloosa County, Rogue Creek, 0.6 km S Base Rd. 232, Eglin Air Force Base, 30°33'19"N, 86°34'52"W; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 6 [checklist].

Distribution. —U.S.A.

hamistyla Xue & Wang, 1995: 208 [type locality: [China], Baotianman, Henan Province; HAUZ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

harpagula Mey, 1998a: 555 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

harpeodes Yang & Xue, 1994: 9 [type locality: [China], Fujian, Cong-an City, 29 km N of Cong-an, 408 km marker; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

helicina Flint, 1991b: 49 [type locality: Colombia, Depto. Antioquia, Quebrada Espadera, 7 km E Medellín, road to Sta. Elena; NMNH; ♂; ♀]. —Muñoz-Quesada 2000: 277 [checklist].

Distribution. —Colombia.

helmali Chantaramongkol & Malicky, 1986: 515 [type locality: [Sri Lanka], Sabaraganuwa Province, Kitulgala, 21 mi N von Ratnapura, 60–150 m; MZLU; ♂].

Distribution. —Sri Lanka.

hirsuta Wells & Mey, 2002: 126 [type locality: [Philippines] Misamis Or., Dinawihan, Gingoog, 26 km E of Gingoog City, 100–300 m; BPBM; ♂].

Distribution. —Philippines.

hochyangha Schmid, 1959b: 692 [type locality: Iran, Firouzkuh (Ost. 2); CNC; ♂]. —Malicky 1983b: 47 [atlas; ♂]. —Malicky 1997: 143 [distribution; ♂]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 544 [checklist]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —Iran.

hodkovae Chvojka, 2006: 246 [type locality: Iran, Khuzestan prov., 10 km SW Izeh, 31°45'N 49°48'E, 880 m a.s.l.; NMPC; ♂]. —Malicky 2007b: 51 [checklist].

Distribution. —Iran.

hoffmannae Bueno-Soria & Santiago-Fragoso, 1996: 345 [type locality: Mexico, Veracruz, Los Tuxtlas, Arroyo Tebanca, 15 k SE La Estación de Biología Los Tuxtlas; CNIN; ♂].

Distribution. —Mexico.

holzenthali Sykora & Harris, 1994: 73 [type locality: [United States], Mississippi, Stone Co., Flint Creek, Hwy 26, 7.9 km E Wiggins; CUAC; ♂].

Distribution. —U.S.A.

homochitta Harris & Sykora, 1996: 21 [type locality: [United States], Mississippi, Franklin County, Porter Creek (T5N, R4E, S8NW); CMNH; ♂].

Distribution. —U.S.A.

hossa Oláh & Johanson, 2011: 121 [type locality: Peru, San Martin Prov., stream crossing Juan Guerra-Chazuta rd., 10 km (rd.) W Chazuta, 6°37.157'S 76°10.905'W; NHRS; ♂].

Distribution. —Peru.

howelli Houp, Houp, & Harris, 1998: 99 [type locality: [United States], Kentucky, LaRue-Marion County line, Salt Lick Creek on Salt Lick Road; NMNH; ♂].

Distribution. —U.S.A.

huaivat Malicky, Suwannarat, & Laudee, 2018: 1319 [type locality: Thailand, Huai Vat (Nebenbach des Klong Kay) bei Ban Pak Lang, nahe der Grenze zum Kao Nan Nationalpark, 8°47'N, 99°35'E, 140 m; Collection Malicky; ♂].

Distribution. —Thailand.

hyllos Malicky, 2004b: 292 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), unweit des Wehrs des Babai Flusses, über das die Brücke der Ost-West-Hauptstraße Nepals (Mahindra Highway), 28°25'N, 81°23'E, 190 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 500 [distribution].

Distribution. —Nepal.

icona Mosely, 1937b: 161 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂]. —Edwards 1973: 506 [distribution]. —Cloud and Stewart 1974: 806 [biology; distribution]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Resh et al. 1978: 383 [distribution]. —Blickle 1979: 48, 71 [checklist; ♂]. —Unzicker et al. 1982: 9, 13 [checklist]. —Bueno-Soria 1984: 110 [♂; distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton et al. 1994: 169 [distribution]. —Moulton and Stewart 1996: 100 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton and Stewart 1998: 106 [biology; distribution]. —Harris and Holzenthal 1999: 38 [♂; distribution]. —Maes 1999: 1193 [checklist]. —Flint et al. 2003: 33 [♀; distribution; introduced to Hawaii]. —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2005: 68 [biology; distribution]. —Blinn and Ruiter 2006: 332 [biology; distribution]. —Bowles et al. 2007: 21 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Blinn and Ruiter 2009a: 305 [biology]. —Blinn and Ruiter 2009b: 186 [phenology;

distribution]. —Harris et al. 2012: 6 [♂; distribution]. —Barba-Álvarez et al. 2019: 85 [distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Costa Rica, Honduras, Mexico, Nicaragua, U.S.A.

idefix Malicky, 1979: 6 [type locality: Portugal, Foz do Alva; Collection Malicky; ♂]. —Malicky 1983b: 42 [atlas; ♂]. —González et al. 1986: 113 [distribution]. —Malicky 2004a: 51 [atlas]. —Malicky 2005b: 544 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Martín et al. 2016: 261 [distribution].

Distribution. —Portugal, Spain.

incertula Mosely, 1934a: 145 [type locality: [Australia, Queensland] Brisbane; Collection Tillyard (transferred to NHMUK according to Wells, 1978: 761); ♂]. —Mosely and Kimmins 1953: 507 [♂]. —Wells 1978: 761 [♂]. —Wells 1978: 761 [♂]. —Wells 1984: 269 [distribution]. —Wells 1985b: 7 [case]. —Neboiss 1986: 61 [atlas; ♂]. —Wells 1990b: 385 [♂; ♀; case; distribution]. —Wells 1991: 501 [distribution]. —Malicky et al. 2010: 163 [distribution]. —Malicky 2010a: 27 [atlas; ♂]. —Malicky et al. 2014b: 832 [distribution]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia, Indonesia, Papua New Guinea, Philippines, Vanuatu.

inornata Flint, 1991b: 47 [type locality: Colombia, Dpto. Antioquia, Quebrada Espadera, 7 km E Medellín, road to Sta. Elena; NMNH; ♂; ♀]. —Muñoz-Quesada 2000: 277 [checklist].

Distribution. —Colombia.

insubrica Ris, 1903: 16 [type locality: [Switzerland], Kantons Tessin, Mendrisio; depository not designated; ♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Moretti et al. 1981: 350, 354 [biology; distribution]. —Malicky 1983b: 45 [atlas; ♂]. —Cianficconi et al. 1999a: 57 [distribution]. —Valle 2001: 66 [distribution]. —Malicky 2004a: 54 [atlas]. —Malicky 2005b: 544 [checklist]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Robert 2007: 82 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 140 [distribution].

Distribution. —Germany, Italy, Spain, Switzerland.

introspinata Zhou & Sun in Zhou et al. 2009a: 906, 910 [type locality: [China], Heilongjiang Province, Yichun City, 21°43'N, 128°53'E, Wuyiling, Ximiganhe, 310 m; NAUJ; ♂]. —Malicky 2014a: 1610 [possible junior synonym to *H. spinosa*]. —Yang et al. 2016: 476 [checklist]. —Park et al. 2018: 103 [♂; distribution]. —Ito and Shimura 2019: 30 [♂; ♀; distribution]. —Park and Kong 2020: 297 [checklist].

Distribution. —China, Japan, Korea.

ion Malicky, 2004b: 292 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, Kyuban Khola, 460 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 500 [distribution].

Distribution. —Nepal.

isabellae Gibon, 1987a: 129 [type locality: sur le Niouniourou à Zakpabéri (bassin du Niouniourou (Côte d'Ivoire); MNHN; ♂]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Côte d'Ivoire, Ghana.

ivisa Malicky, 1972: 30 [type locality: Austria inf., Lunz, Biologische Station; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 12 [♂; distribution]. —Malicky 1983b: 45 [atlas; ♂]. —Kumanski 1985: 139 [♂]. —Cianficconi and Moretti 1987: 670 [distribution]. —Weinzierl and Dorn 1995: 43 [distribution]. —Cianficconi et al. 1999a: 57 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 54, 64 [atlas]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Graf et al. 2005: 55 [distribution]. —Malicky 2005b: 544 [checklist]. —Robert 2007: 82 [checklist]. —Szczyński and Godunko 2008: 15 [checklist]. —Coppa 2010: 23 [distribution]. —Komzák and Kroča 2011: 190 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Malicky 2014b: 15 [teratological structures]. —Cianficconi et al. 2016: 140 [distribution].

Distribution. —Austria, Bulgaria, Czech Republic, France, Germany, Italy, Slovenia, Ukraine.

jackmanni Blickle, 1963: 17 [type locality: [United States], Maine, Dennistown; INHS; ♂]. —Etnier 1965: 147 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 48, 67 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Swegman et al. 1981: 132 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Huryn 1983: 93 [♀]. —Waltz and McCafferty 1983a: 10 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Harris et al. 1996: 240 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Houghton et al. 2011b: 5 [distribution; biology]. —Houghton et al. 2011a: 388 [distribution; biology]. —Armitage et al. 2011: 14 [checklist]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 62 [checklist].

Distribution. —U.S.A.

jamin Malicky, O'Connor, Ashe, & Dowling, 2010: 157 [type locality: Indonesia, Sulawesi, Bogani Nani Wartabone National Park, second waterfall on the Sungai Elok (waterfall stream), 0°36'N 123°54'E; NMID; ♂].

Distribution. —Indonesia.

jaruma Wells, 1990b: 388 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Site 6; NHMUK; ♂].

Distribution. —Indonesia.

jeannae Gibon, 1987a: 128 [type locality: [Côte d'Ivoire], sur le Cavally à Taï; MNHN; ♂]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Côte d'Ivoire, Ghana.

juba Enderlein, 1929: 232 [type locality: [Spain], Tenerife SW, in vorderen Teile des Baranco del Infierno, oberhalb von Adeje, am Rande eines in Felsen eingehauenen Wasserlaufes, dermit niederen Pflanzen bestanden; depository not designated; ♂]. —Nybom 1948: 5 [considered synonym of *H. fortunata*]. —Botosaneanu 1967: 294 [as synonym of *H. fortunata*]. —Malicky 1987: 30 [considered distinct

from *H. fortunata*]. —Malicky 1988a: 23 [morphological comparison with *H. fortunata*]. —Botosaneanu 2003: 107 [considered distinct from *H. fortunata*]. —Malicky 2004a: 53 [atlas]. —Malicky 2005b: 544 [checklist]. —Hughes 2006: 29 [biology]. —González and Menéndez 2008: 188 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —*espada* Malicky, 1981a: 182 [type locality: Portugal, Porto Espada; Collection Malicky; ♂]. —Malicky 1983b: 44 [atlas; ♂]. —Malicky 1987: 30 [to synonymy]. —Malicky 1988a: 23 [as synonym of *H. juba*]. —Botosaneanu 2003: 107 [as synonym of *H. fortunata*].

Distribution. —Portugal, Spain.

judithae Gibon, 1987a: 128 [type locality: [Guinea], sur le Niger en amont de Kissidougou; MNHN; ♂].

Distribution. —Guinea.

juram Malicky & Chantaramongkol, 2007: 1012 [type locality: Malaysia, Pahang: Merapoh, Taman Negara, Kuala Juram, 4°38'N 102°07'E, 150 m; Collection Malicky; ♂]. —Malicky 2010a: 27 [atlas; ♂].

Distribution. —Malaysia.

kairos Malicky, 2004b: 293 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, vom “östlicher” Bach, 320 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 500 [distribution].

Distribution. —Nepal.

kakidaensis Nozaki & Tanida, 2007: 246 [type locality: Japan, Kakida, Shimizuho, Shizuoka, 35°06'N 138°54'E; CBM-ZI; ♂; ♀]. —Ito et al. 2011: 19 [♂, ♀; distribution]. —Ito 2015: 8 [checklist]. —Tanida and Kuranishi 2016: 70 [checklist].

Distribution. —Japan.

kalchas Malicky, 2004b: 293 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, vom “östlicher” Bach, 320 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [checklist]. —Malicky 2010a: 23 [atlas; ♂]. —Mattern 2015: 500 [distribution].

Distribution. —Nepal, Thailand.

kalonichtis Malicky, 1972: 30 [type locality: [Greece], Kreta, Kalonichtis; Collection Malicky; ♂]. —Malicky 1974: 122 [checklist]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 14 [♂; distribution]. —Malicky 1981a: 183 [♂]. —Malicky 1983b: 44 [atlas; ♂]. —Kumanski 1985: 127 [♂]. —Sipahiler and Malicky 1987: 129 [distribution]. —Malicky 2004a: 53 [atlas]. —Malicky

2005a: 60 [distribution]. —Malicky 2005b: 544 [checklist; distinct from *H. vichtaspa*]. —Sipahiler 2005: 397 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution]. —Sipahiler 2017b: 12 [distribution]. —Oláh 2017: 137 [distribution].

Distribution. —Bulgaria, Greece, Turkey.

karikatla Oláh & Johanson, 2011: 123 [type locality: Peru, San Martin Prov., creek crossing rd. Tarapoto-Yurimaguas, ca. 30 km (rd.) NE Tarapoto, 6°24.904'S 76°18.756'W; NHRS; ♂].

Distribution. —Peru.

karima Oláh & Johanson, 2011: 123 [type locality: Peru, Amazonas Prov., river crossing Olmos-Tarapoto rd., 371 km (rd.) E Olmos Desv. Jaén, 5°41.178'S 77°46.421'W; NHRS; ♂].

Distribution. —Peru.

kaschgari Mey, 1993: 335 [type locality: China, Xinjiang, Kashi (=Kaschgar), Abzugsgräben der Reisfelder im Süden; ZMHB; ♂]. —Yang et al. 2005: 458 [checklist]. —Huang et al. 2005: 469 [distribution]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

kebawah Wells & Huisman, 1992: 104 [type locality: East Malaysia, Sabah, 20 km NE Ranau, Kg Nalumad, Sg. Mokodou, 06°06'N 116°43'E, 400 m; RMNH; ♂]. —Malicky 2010a: 34 [atlas; ♂].

Distribution. —Malaysia.

keres Malicky, 2004b: 293 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), unweit des Wehrs des Babai Flusses, über das die Brücke der Ost-West-Hauptstraße Nepals (Mahindra Highway), 28°25'N, 81°23'E, 190 m, Budhi Khola; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [checklist]. —Oláh and Johanson 2010a: 15 [♂; distribution]. —Malicky 2010a: 24 [atlas; ♂]. —Mattern 2015: 500 [distribution]. —Bunlue et al. 2012: 15 [distribution]. —Malicky 2018: 49 [checklist]. —Malicky et al. 2018: 1323 [distribution].

Distribution. —Laos, Nepal, Thailand.

khonga Oláh & Johanson, 2010a: 16 [type locality: Vietnam, Lamdong Province, Baoloc, Baco stream; Collection Oláh; ♂]. —Malicky 2013: 43 [possible junior synonym to *Hydroptila trullata*].

Distribution. —Vietnam.

kieneri Marlier & Marlier, 1982: 20 [type locality: La Réunion, Station 58, sud de Piton Sainte-Rose, Anse des Cascades, 20–30 m, dans Cascade d'eau très claire et ruisseau; IRSNB; ♂; larva]. —Botosaneanu 2002a: 328 [♂].

Distribution. —Réunion.

kirilawela (Schmid, 1958b): 66 [type locality: [Sri Lanka], Ceylan, Kitulgala (Sab., 750 ft) 2-III, Kelani Ganga, belle rivière coulant dans une vallée étroite et boisée, à la sortie des montagnes; depository not designated; ♂; in *Oxydroptila*].

Distribution. —Sri Lanka.

klapperichi Malicky, 1996b: 203 [type locality: Jordan, Amman; LNKD; ♂].
—Malicky 2004a: 64 [atlas]. —Malicky 2005b: 544 [checklist].

Distribution. —Jordan.

koropa Wells, 1984: 266 [type locality: [Papua] New Guinea, NE., Korop, Upper Jimmi Valley, 1300 m; BPBM; ♂]. —Neboiss 1986: 64 [atlas; ♂]. —Wells 1991: 503 [distribution].

Distribution. —Papua New Guinea.

koryaki Harris & Sykora, 1996: 17 [type locality: [United States], West Virginia, Lewis County, Right Fork of the West Fork River, Walkersville; CMNH; ♂]. —Armitage et al. 2011: 14 [checklist].

Distribution. —U.S.A.

kreusa Malicky, 2004b: 294 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, Kyuban Kholā, 460 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 500 [distribution]. —Malicky 2018: 49 [checklist].

Distribution. —Nepal.

kuehnei Houpp, Houpp, & Harris, 1998: 100 [type locality: [United States], Kentucky, LaRue-Marion County line, Salt Lick Creek on Salt Lick Road; NMNH; ♂].

Distribution. —U.S.A.

kurukepitiya Schmid, 1958b: 62 [type locality: [Sri Lanka], Ceylan, Nuwara Eliya (C. P.) 26-II, cours supérieur de la Nanu Oya, petite rivière rapide, sur lit caillouteux; depository not designated; ♂].

Distribution. —Sri Lanka.

lacandona Bueno-Soria, 1984: 118 [type locality: Mexico, Chiapas, 10 km from Bonampak; CNIN; ♂]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Mexico.

lagoi Harris, 1985a: 248 [type locality: [United States], Alabama, Tuscaloosa County, Big Sandy Creek at spring, 4 miles S Coaling, T22N, R7E, S25; NMNH; ♂]. —Harris et al. 1991: 185 [distribution].

Distribution. —U.S.A.

laloka Wells, 1991: 503 [type locality: Papua New Guinea, Central Province, Laloki River at Rouna Falls, 9°25'S 147°27'E; ANIC; ♂].

Distribution. —Papua New Guinea.

latifilis Zhou & Yang in Zhou et al. 2009b: 355 [type locality: China, Guangxi Zhuang Autonomous Region, Shangsi City, Nalin He, tributary of Mingjiang He, 2.0 km NW of main entrance to Shiwandashan National Forest Park, 21°51'N 107°53'E, 281 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

latosa Ross, 1947: 148 [type locality: [United States], Georgia, Tharpes' Pond; INHS; ♂]. —Blickle, 1979: 48, 73 [checklist; ♂]. —Harris et al. 1982b: 81 [distribution]. —Harris et al. 1991: 186 [distribution]. —Pescador et al. 2004: 133 [checklist].

—Biondi 2010: 60 [distribution]. —Harris et al. 2012: 6 [♂; checklist]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

lennoxi Blickle, 1969: 79 [type locality: [United States], Jefferson, New Hampshire; INHS; ♂]. —Blickle 1979: 48, 65 [checklist; ♂]. —Harris et al. 1991: 187 [distribution]. —Armitage et al. 2011: 14 [distribution].

Distribution. —U.S.A.

lenora Blickle & Denning, 1977: 295 [type locality: [United States], Oregon, Malheur County, Three Forks, 40 miles south of Jordan Valley, on the main branch of the Owyhee River, one mile upriver of the confluence of the 3 branches of the river; FSCA; ♂]. —Blickle 1979: 48, 69 [checklist; ♂].

Distribution. —U.S.A.

leptocera Zhou & Yang in Zhou et al. 2009a: 905, 910 [type locality: [China], Guangxi Zhuang Autonomous Region, Shangsi City, Nalinhe, Trib of Mingjiang He, 2.0 km NW of main entrance to Shiwandashan National Forest Park, 21°54'N, 107°53'E, 281 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

libanica Botosaneanu & Dia in Dia and Botosaneanu 1983: 130 [type locality: [Lebanon], Station 9, Le Nahr ed Damour à 500 m en aval de son confluent avec Nahr el Hammam, il s'agit des 4 derniers km du cours d'eau, avant qu'il ne se jette à la mer, de 40 à 0 m; ZMUA; ♂]. —Botosaneanu 1992: 71 [♂, ♀]. —Malicky 2004a: 61 [atlas]. —Malicky 2005b: 544 [checklist]. —Dia 2015: 51 [distribution].

Distribution. —Lebanon.

licina Frazer & Harris, 1991b: 6 [type locality: [United States], Alabama, DeKalb County, West Fork of the Little River at DeSoto State Park, 50 m downstream mouth of Laurel Creek (Sec. 20, T 6 S, R 10 E); NMNH; ♂]. —Frazer et al. 1991: 19 [distribution].

Distribution. —U.S.A.

lidah Wells & Huisman, 1992: 101 [type locality: East Malaysia, Sabah, 12 km NNE Ranau, Poring Hot Springs, Sg. Langanan, 06°03'N 116°43'E, 450 m; RMNH; ♂]. —Malicky 2010a: 34 [atlas; ♂].

Distribution. —East Malaysia.

lingigi Mey, 1998b: 4 [type locality: [Philippines], Mindanao, Surigao del Sur, Lingig; ZMHB; ♂].

Distribution. —Philippines.

lloganae Blickle, 1961: 131 [type locality: [United States], Chattahoochee, Florida; INHS; ♂]. —Blickle 1979: 48, 69 [checklist; ♂]. —Etnier and Baxter 1999: 147 [♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 6 [♂; checklist].

—*morsei* Sykora & Harris, 1994: 71 [type locality: [United States], South Carolina, Dorchester Co., Four Holes Swamp, Goodsons Lake; CUAC; ♂]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Etnier and Baxter 1999: 147 [to synonymy].

Distribution. —U.S.A.

lonchera Blickle & Morse, 1954: 122 [type locality: [United States], Lee, N. H.; INHS; ♂]. —Blickle 1979: 48, 67 [checklist; ♂]. —Uris and Foote 1989: 84 [distribution]. —Harris et al. 1991: 188 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Myers et al. 2011: 106 [distribution]. —Flint 2014: 90 [distribution].

Distribution. —U.S.A.

longidorsalis Zhou & Yang in Zhou et al. 2009a: 908, 911 [type locality: [China], Guangxi Zhuang Autonomous Region, Shangsì City, Shiwandashan National Forest Park, Shitouhe at Second Trib, 3.4 km SW of main entrance to park, 21°53'N, 107°54'E, 392 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist; as *longitabularis*].

Distribution. —China.

longifilis Yang & Xue, 1994: 10 [type locality: [China], Sichuan, Pingwu county, 19 km E of Pingwu, tributary of Fujiang River, 1090 m; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

longissima Bueno-Soria, 1984: 97 [type locality: Mexico, Guerrero, Acahuizotla; CNIN; ♂; as *longissimus*].

Distribution. —Honduras, Mexico.

losida Mosely in Mosely and Kimmins 1953: 505 [type locality: [Australia] Queensland, Eidswold; ANIC; ♂]. —Wells 1978: 757 [♂; ♀; distribution]. Wells 1985b: 6 [case; larva]. —Neboiss 1986: 60 [atlas; ♂; ♀]. —Wells 1995: 231 [distribution]. —Oláh and Johanson 2010a: 18 [distribution]. —Wells and Johanson 2015: 82 [distribution]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —Australia, New Caledonia.

lotensis Mosely, 1930b: 243 [type locality: France, Lot, Cahors; NHMUK; ♂]. —Martynov 1934: 133 [♂]. —Racięcka 1936: 98 [distribution]. —Schmid 1959b: 691 [distribution]. —Nybom 1960: 17 [checklist]. —Kimmins 1961: 32 [distribution; ♂; ♀]. —Botosaneanu 1967: 294 [distribution]. —Szczęsny 1975: 41 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 9 [♂; distribution]. —Çakin 1983: 246 [distribution]. —Malicky 1983b: 47, 52 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Nógrádi 1985: 131 [distribution; ♂]. —Kumanski 1985: 123 [♂]. —Nógrádi 1986: 139 [distribution]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Sipahiler and Malicky 1987: 122 [distribution]. —Cooter 1987: 148 [distribution]. —Rojas-Camousseight and Tachet 1988: 313–314 [♀]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Spuris 1989: 16 [checklist]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Nógrádi 1994: 277 [♂ ♀]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Malicky 1997: 143 [distribution; ♂]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Graf et al. 1998: 206 [distribution]. —Peissner et al. 1998: 169 [distribution]. —Peissner and Kappus 1998: 162, 163 [distribution]. —Malicky 1999f: 31 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Urbanič et al. 2000: 45 [distribution]. —Uherkovich and Nógrádi 2001: 95 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Coppa 2001: 94 [distribution]. —Mirmoayedi and

Malicky 2002: 164 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Malicky 2004a: 57 [atlas]. —Malicky 2005b: 544 [checklist]. —Komzák and Chvojka 2005: 65 [distribution]. —Malicky 2005a: 61 [distribution]. —Sipahiler 2005: 397 [distribution]. —Gullefors 2006: 137 [distribution]. —Mey 2006a: 159 [distribution]. —Robert 2007: 82 [checklist]. —Szczęsny and Godunko 2008: 15 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Gullefors 2008: 64 [checklist]. —Višinskienė 2009: 27 [checklist]. —Neu 2010: 150 [♀]. —González and Menéndez 2011: 119 [distribution]. —Ivanov 2011: 195 [checklist]. —Komzák and Chvojka 2012: 719 [distribution]. —Lock and Goethals 2012: 28 [checklist]. —Kiss 2012: 28 [distribution]. —Stanić-Košťroman et al. 2015: 85 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Sipahiler 2016: 12 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 15, 20, 22, 23, 26, 50 [conservation status]. —Melnitsky et al. 2017: 6 [distribution]. —Ibrahimi et al. 2017: 189 [distribution]. —Lock and van Butsel 2018: 3 [distribution; ♀]. —O'Connor and O'Connor 2019: 229 [distribution]. —Cerjanec et al. 2020: 13 [distribution]. —Oláh et al. 2020: 45 [distribution]. —Navara et al. 2020: 46 [distribution].

Distribution. —Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, England, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Lithuania, Luxembourg, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey, Ukraine.

luzonensis Mey, 2003b: 433 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

lyaios Malicky, 2004b: 294 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, Ratomate Khola, 350 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

maculata (Banks, 1904b): 116 [type locality: [United States], Virginia, Falls Church; MCZ; ♂; in *Allotrichia*]. —Banks 1904a: 215 [distribution]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 148 [checklist]. —Milne 1936: 76 [to *Hydroptila*]. —Ross 1938b: 9 [lectotype designated; ♂]. —Ross 1944: 296 [checklist]. —Blickle 1979: 48, 65 [checklist; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 6 [♂; checklist].

—***transversa*** Banks, 1907b: 163 [type locality: [United States], Washington, D.C.; MCZ; ♂]. —Banks 1907a: 50 [catalogue]. —Milne 1936: 77 [as synonym of *albicornis*]. —Ross 1938b: 9 [lectotype designated; to synonymy].

Distribution. —U.S.A.

maetalai Malicky & Chantaramongkol, 2007: 1014 [type locality: Thailand, Mae Talai (Süd), 19°16'N 98°37'E, 400 m; Collection Malicky; ♂]. —Malicky 2010a: 29 [atlas; ♂].

Distribution. —Thailand.

makaplag Wells & Mey, 2002: 126 [type locality: [Philippines] Leyte, Makaplag; BPBM; ♂].

Distribution. —Philippines.

malacitana González & Ruiz in González et al. 2013: 397 [type locality: [Spain], Júzcar (36°37'10"N, 005°09'13.9"W), Vado del Genal, Río Genal, Serranía de Ronda, 521 m, Málaga; DZUSC; ♂]. —Ruiz-García et al. 2016: 4 [distribution].

Distribution. —Spain.

manavgatensis Malicky & Çakin in Çakin and Malicky 1983: 270 [type locality: [Turkey], Antalya, Manavgat, Besonak; depository not designated; ♂]. —Sipahiler and Malicky 1987: 129 [distribution]. —Malicky 2004a: 53 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution]. —Sipahiler 2017b: 12 [distribution]. —Sipahiler 2018: 41 [distribution].

Distribution. —Turkey.

maoae Gibon, Guenda, & Coulibaly, 1994: 110 [type locality: sur la haute Léraba (bassin de la Comoé, région de Banfora, Burkina Faso); MNHN; ♂]. —Wells and de Moor 2020: 497 [distribution].

Distribution. —Angola, Burkina Faso.

mariatheresae Gibon, 1987a: 127 [type locality: sur le Bakoye à Kita (bassin du Sénégal, Mali); MNHN; ♂]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Ghana, Mali.

marighellai de Souza, Santos, & Takiya, 2014b: 640 [type locality: Brazil, Ceará, Parque Nacional de Ubajara, Rio das Minas próximo ao teleférico, 03°48'58"S 40°53'53"W, 420 m; CZMA; ♂]. —Moreno et al. 2020: 265 [distribution].

Distribution. —Brazil.

maritza Harris & Holzenthal, 1999: 21 [type locality: Costa Rica, Guanacaste, Parque Nacional Guanacaste, Maritza, Río Tempisquito, 10.958°N 85.497°W; NMNH; ♂].

Distribution. —Costa Rica.

martini Marshall, 1977: 116 [type locality: [England], R. Lambourne, Berkshire; NHMUK; ♂; ♀; *H. occulta* sensu aucttorum nec (Eaton, 1873)]. —Mosely 1939: 265 [[♀; as *H. occulta*]. —Schmid 1947: 529 [♀; as *H. occulta*]. —O'Connor and O'Connor 1980: 167 [distribution]. —Moretti et al. 1981a: 350, 354 [biology; distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 48, 52 [atlas; ♂; ♀]. —Maier et al. 1995: 147 [distribution]. —Hohmann 1998: 73 [distribution]. —Hohmann 1999: 34, 35 [distribution; checklist]. —Wiberg-Larsen and Holm 1999: 118 [distribution]. —Cianficconi et al. 1999b: 278 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Cianficconi et al. 2002: 146 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 60 [atlas]. —Malicky 2005b: 544 [checklist]. —Coppa and Tachet 2005: 130 [♀]. —Cianficconi et al. 2005: 96 [habitat; distribution]. —Graf et

al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Chvojka and Komzák 2006: 358 [distribution]. —Gullefors and Johanson 2007: 62 [distribution; ♂; ♀]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Cianficconi and Corallini 2010: 87 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Cianficconi et al. 2011: 47 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —O'Connor 2015: 28, 82 [distribution]. —Cianficconi et al. 2016: 140 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 21, 24 [conservation status]. —O'Connor and O'Connor 2017b: 53 [distribution]. —Valle and Lodovici 2018: 146 [distribution]. —Komzák and Kroča 2018: 166 [distribution]. —O'Connor and O'Connor 2018: 82 [distribution]. —Edmonds-Brown 2020: 91 [checklist].

Distribution. —Austria, Czech Republic, Denmark, England, Germany, Hungary, Ireland, Italy, Slovenia, Romania, Spain, Sweden.

martorelli Flint, 1964: 52 [type locality: Puerto Rico, Maricao, at fish hatchery; NMNH; ♂; ♀; larva; case]. —Flint 1968a: 82 [checklist]. —Malicky 1983c: 264 [distribution]. —Flint and Sykora 1993: 50 [checklist]. —Botosaneanu 1994a: 41 [distribution]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 83 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Guadeloupe, Puerto Rico.

maza Harris & Holzenthal, 1999: 29 [type locality: Costa Rica, San José, Reserva Biológica Carara, Río de Sur, 1.5 km (rd) S Carara, 9.769°N 84.531°W; NMNH; ♂]. —Armitage et al. 2016: 7 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Costa Rica, Panama.

mazumbaiensis Wells & Andersen, 1995: 160 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 7, 1535 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

medinai Flint, 1964: 54 [type locality: Puerto Rico, Maricao, at fish hatchery; NMNH; ♂; ♀]. —Flint 1968a: 82 [checklist]. —Botosaneanu 1977: 271 [♂; variation; distribution]. —Botosaneanu 1979: 51 [distribution]. —Kumanski 1987: 30 [distribution]. —Botosaneanu 1991: 130 [distribution]. —Flint 1996a: 16 [checklist]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 83 [checklist]. —Flint and Sykora 2004: 31 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Cuba, Dominican Republic, Haiti, Puerto Rico.

melia Ross, 1938a: 128 [type locality: [United States], Oklahoma, Turner Falls State Park, along Honey Creek; INHS; ♂]. —Blickle 1979: 48, 69 [checklist; ♂]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 100 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Bowles et al. 2007: 21 [distribution; biology].

Distribution. —U.S.A.

mendli mendli Malicky, 1980a: 7 [type locality: [Morocco], Gorges du Todra, 1400 m; depository not designated; ♂]. —Malicky 1983b: 49 [atlas; ♂]. —Botosaneanu 1984: 136 [♂]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Malicky 2004a: 61 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution].

Distribution. —Morocco, Turkey.

mendli levanti Botosaneanu, 1984: 137 [type locality: [Lebanon], sur le Nahr ed Damour en aval de son confluent avec le Nahr el Hammam, Liban Central, il s'agit des 4 derniers kilomètres d'une petite rivière prenant ses sources dans le versant occidental de la montagne du Barouk et se jetant à la Méditerranée entre Saïda et Beyrouth; ZMUA; ♂]. —Botosaneanu 1992: 67 [♂]. —Dia 2015: 51 [distribution].

Distribution. —Lebanon.

meralda Mosely, 1937b: 162 [type locality: Mexico, Chiapas, Esmeralda; NHMUK; ♂]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Bueno-Soria 1984: 109 [♂;]. —Harris and Holzenthal 1999: 42 [♂; distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Costa Rica, Mexico, Nicaragua.

metoeca Blickle & Morse, 1954: 127 [type locality: [United States], Lee, N. H.; INHS; ♂]. —Etnier 1968: 191 [distribution]. —Blickle 1979: 48, 65 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Marshall and Larson 1982: 30 [distribution]. —Lake 1984: 219 [checklist]. —Usis and Foote 1989: 84 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Houghton and Holzenthal 2003: 37 [not found in MN; conservation status]. —Myers et al. 2011: 106 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2011b: 5 [phenology; habitat]. —Wright et al. 2013: 466 [biology; distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 62 [checklist].

Distribution. —Canada, U.S.A.

metteei Harris, 1991: 12 [type locality: [United States], Alabama, Houston County, Cowarts Creek at unnumbered Co. Hwy., 8.8 km ENE Cottonwood (Sec. 10, T 1 N., R 28 E); NMNH; ♂]. —Harris et al. 1991: 189 [distribution]. —Harris et al. 2012: 6 [distribution]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

mexicana Mosely, 1937b: 160 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Bueno-Soria 1984: 109 [♂; distribution]. —Harris and Holzenthal 1999: 42 [♂; distribution]. —Maes 1999: 1193 [checklist]. —Bueno-Soria et al. 2005: 75 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Armitage et al. 2016: 7 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution]. —Razo-González et al. 2020: 5 [distribution].

Distribution. —Costa Rica, Honduras, Mexico, Nicaragua, Panama.

micropotamis Harris, 1989: 312 [type locality: [United States], Alabama, De Kalb County, Little River at Canyon Park, 4 miles E Dog Town, T8S, R9E, S10; NMNH; ♂]. —Harris et al. 1991: 190 [distribution]. —Frazer et al. 1991: 19 [distribution].

Distribution. —U.S.A.

mindamontana Mey, 1998a: 553 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist]. —Malicky 2013: 43 [possible junior synonym to *H. pedemontana*].

Distribution. —Philippines.

misolha Bueno-Soria, 1984: 127 [type locality: Mexico, Chiapas, Cascada de Misolha; CNIN; ♂]. —Maes and Flint 1988: 4 [distribution]. —Harris and Holzenthal 1999: 45 [♂; distribution]. —Maes 1999: 1193 [checklist]. —Bueno-Soria et al. 2005: 75 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist].

Distribution. —Belize, Costa Rica, Honduras, Mexico, Nicaragua.

mitirigalla Schmid, 1958b: 64 [type locality: [Sri Lanka], Ceylan, Lauderdale (Sab., 3500 ft) 5-II, torrent très raide, avec chutes; depository not designated; ♂].

Distribution. —Sri Lanka.

modica Mosely, 1937b: 163 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Blickle 1979: 48, 63 [checklist; ♂]. —Bueno-Soria 1984: 90 [♂; distribution]. —Moulton and Stewart 1997: 350 [distribution]. —Newell et al. 2001: 192 [distribution; phenology]. —Blinn and Ruiter 2005: 68 [distribution; biology]. —Bowles et al. 2007: 21 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Vieira et al. 2009: 257 [distribution]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Mendez et al. 2019: 128 [checklist].

Distribution. —Mexico, U.S.A.

mokowu Wells & Huisman, 2001: 208 [type locality: Sulawesi Tenggara, N slope of Gunung Watuwila, 250 m, Sungai Mokowu; RMNH; ♂].

Distribution. —Indonesia.

molsonae Blickle, 1961: 132 [type locality: [United States], Florida, Highlands Hammock State Park, Highlands Co.; INHS; ♂]. —Blickle 1979: 48, 67 [checklist; ♂]. —Harris et al. 1982a: 510 [distribution]. —Harris et al. 1991: 191 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 6 [♂; checklist]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

montatan Malicky & Chantaramongkol, 2007: 1019 [type locality: Thailand, Doi Suthep NP, Montatan WF, 18°49'N 98°55'E, 550 m; Collection Malicky; ♂]. —Malicky 2010a: 25 [atlas; ♂].

Distribution. —Thailand.

morogorensis Wells & Andersen, 1995: 158 [type locality: Tanzania, Morogoro region, Morogoro, Sokoine University of Agriculture, 550 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

morpheus Malicky, 2004b: 294 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), unweit des Wehrs des Babai Flusses, über das die Brücke der Ost-West-Hauptstraße Nepals (Mahindra Highway), 28°25'N, 81°23'E, 190 m, Budhi Khola; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

moselyi Ulmer, 1932: 42 [type locality: [China], Peiping; ZMUH; ♂]. —Kumanski 1990: 48 [distribution]. —Xue et al. 1992: 353–356 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist]. —Park and Kong 2020: 297 [checklist].

Distribution. —China, Korea.

moxica Wells & de Moor, 2020: 498 [type locality: Angola, Moxico Province, Cuando River, Site 8 — Cuando campsite bridge, -13.607, 19.53235; AMGS; ♂].

Distribution. —Angola.

mugla Sipahiler, 1989: 131 [type locality: Turkey, Mugla, Fethiye, 30 km to Köycegiz, 29°02'N, 36°45'E; depository not designated; ♂]. —Malicky 2004a: 63 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution]. —Melnitsky et al. 2017: 6 [distribution].

Distribution. —Turkey.

murtlei Harris, Rasmussen, & Denson, 2012: 2 [type locality: [United States], Florida, Bay Co., Little Crooked Creek at SR-79, Pine Log State Forest, 2.4 km S Ebro, N30°24'48", W85°52'04"; NMNH; ♂]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

nago Ito, in Ito and Shimura 2019: 27 [type locality: Japan, Ryukyu, Okinawa-jima, Nago-shi, Genka, Genka-gawa, Hogen-hashii (26.6292 N, 128.0847 E, 90 m above sea level); CBM-ZI; ♂].

Distribution. —Japan.

nambelensis Johanson, Wells, Malm, & Espeland, 2011: 290 [type locality: [Vanuatu] Espiritu Santo, Central Santo, stream in small canyon crossing path to village, 5.5 km NW Nambel, 208 m, loc#21, 15°27.459'S 167°04.022'E; NHRS; ♂].

Distribution. —Vanuatu.

namcattien Malicky & Chantaramongkol, 2007: 1020 [type locality: Vietnam, Nam Cat Tien, 11°26'N 107°26'E, 200 m; Collection Malicky; ♂]. —Malicky 2010a: 32 [atlas; ♂].

—***motminh*** Oláh & Johanson, 2010a: 18 [type locality: Laos, Luang Namtha Prov., Nam Ha NBCA, Nam Gnan stream, 300 m upstr. Namgnen Village, 558 m; NHRS; ♂]. —Malicky 2013: 43 [to synonymy].

Distribution. —Laos, Vietnam.

nanseiensis Ito, in Ito et al. 2011: 15 [type locality: Japan, Okinawa, Yaeyima Islands, Ishigaki-jima, Omoto-dake, 24°25'N 124°11'E, 80 m; CBM-ZI; ♂]. —Ito 2015: 8, 15 [distribution]. —Tanida and Kuranishi 2016: 70 [checklist].

Distribution. —Japan.

narifer Flint, 1991b: 47 [type locality: Colombia, Dpto. Antioquia, Quebrada La Jiménez, Sopetrán; NMNH; ♂; ♀]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

nasuli Wells & Mey, 2002: 130 [type locality: [Philippines] Mindanao, Nasuli nr Malaybalay, Bukidnon; BPBM; ♂]. Malicky and Chantaramongkol 2007: 1024 [distribution]. —Malicky 2009b: 10 [distribution].

Distribution. —Philippines.

neciel Malicky, Melnitsky, & Ivanov, 2020: 538 [type locality: [Indonesia], Papua, 3 km S Wamena, Helaluwa river, 1679 m, 4°08'S, 138°56'E; ZIN; ♂].

Distribution. —Indonesia.

nemtomp Oláh, 2012: 48 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Ron Creek, 0°49'16.37"S 130°49'23.72"E; Collection Oláh; ♂]. —Oláh 2016: 113 [distribution]. —Oláh and Kovács 2018: 179 [distribution].

Distribution. —Indonesia.

neoleonensis Bueno-Soria, 1984: 113 [type locality: Mexico, Nuevo Leon, Linares; NMNH; ♂].

Distribution. —Mexico.

ngaythibaya Oláh, 1989: 283 [type locality: Vietnam, Ngoclac; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Malicky 2010a: 26 [atlas; ♂].

Distribution. —Vietnam.

nicoli Ross, 1941a: 69 [type locality: [Canada], Nova Scotia, Moser River, Gold Mine Brook; INHS; ♂; ♀]. —Blickle 1979: 48, 65 [checklist; ♂]. —Myers et al. 2011: 106 [distribution]. —Flint 2014: 90 [distribution]. —Houghton et al. 2017: 62 [checklist].

Distribution. —Canada, U.S.A.

nigrovalvata Mey, 2003b: 433 [type locality: Philippines, Luzon, Laguna, Pangil; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

novicola Blickle & Morse, 1954: 124 [type locality: [United States], Durham, N. H.; INHS; ♂]. —Etnier 1968: 191 [distribution]. —Blickle 1979: 48, 73 [checklist; ♂]. —Roy and Harper 1979: 151 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1982a: 510 [distribution]. —Harris et al. 1984: 108 [distribution]. —Harris et al. 1991: 192 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Abbott et al. 1997: 44 [distribution]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Houghton and Holzenthal 2003: 39 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Myers et al. 2011: 107 [distribution]. —Harris et al. 2012: 6 [♂; checklist]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

nusagandia Harris & Holzenthal, 1999: 29 [type locality: Panama, San Blas, Quebrada Pingad, 9 km N Nusagandi; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

oakmulgeensis Harris, 1985b: 612 [type locality: [United States], Alabama, Choctaw County, Tallawampa Creek at Co. Hwy. 23; NMNH; ♂]. —Harris et al. 1991: 193 [distribution].

Distribution. —U.S.A.

obscura Wells, 1978: 758 [type locality: [Australia], Queensland, Palmer River; ANIC; ♂; ♀]. —Wells 1985b: 7 [pupa case]. —Neboiss 1986: 62 [atlas; ♂; ♀]. —Wells 1990b: 382 [♂; ♀; case; distribution]. —Wells 1991: 504 [distribution]. —Wells and Huisman 1992: 97 [distribution]. —Wells and Mey 2002: 128 [distribution]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2009b: 10 [distribution]. —Oláh and Johanson 2010a: 19 [distribution]. —Malicky 2010a: 23 [atlas; ♂]. —Malicky et al. 2010: 163 [distribution]. —Oláh 2012: 49 [distribution]. —Oláh 2016: 111 [distribution; ♂].

Distribution. —Australia, Borneo, Indonesia, Malaysia, Papua New Guinea, Philippines.

occulta (Eaton, 1873): 135 [type locality: [England], Mappleton, near Ashbourne, Derbyshire, between the bridge and the weir; NHMUK; ♂; in *Phrixocoma*]. —McLachlan 1880: 512 [revision; ♂]. —Morton 1899b: 281 [distribution]. —Mosely 1919a: 396 [scent-organ]. —Ulmer 1929: 263 [morphological notes]. —Racięcka 1936: 98 [distribution]. —Nielsen 1951: 122 [distribution; ♂; ♀]. —Kimmins 1957a: 109 [lectotype designation]. —Botosaneanu 1967: 294 [distribution]. —Spuris 1972: 28, 30 [checklist]. —Marshall 1977: 119 [revision; ♂; ♀]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 12 [♂; distribution]. —O'Connor and O'Connor 1980: 167 [distribution]. —Mey 1981: 56 [distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Çakin 1983: 246 [distribution]. —Malicky 1983b: 48, 52 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 130 [♂]. —Andersen and Tysse 1985: 84 [distribution]. —Wiberg-Larsen 1985: 40 [checklist]. —Glapska 1986: 30 [distribution]. —Sipahiler and Malicky 1987: 112, 129, 143 [distribution]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Usseglio-Polatera and Bournaud 1989: 254 [distribution]. —Spuris 1989: 16 [checklist]. —Andersen et al. 1990: 52 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Gullefors 2002: 138 [checklist]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Ujvárosi 2002: 384 [distribution]. —Sipahiler 2003b: 33 [distribution]. —Cibaité 2003a: 10 [checklist]. —Malicky 2004a: 60, 64 [atlas]. —Malicky 2005b: 544 [checklist]. —Coppa and Tachet 2005: 127, 130 [♂; ♀]. —Weinzierl et al. 2005: 46 [distribution]. —Malicky 2005a: 61 [distribution]. —Sipahiler 2005: 397 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Hohmann et al. 2006: 111 [distribution]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Sipahiler 2007: 38 [distribution]. —Gullefors and Johanson 2007: 64 [distribution]. —Robert 2007: 82 [checklist].

- Szczęsny and Godunko 2008: 15 [checklist]. —Gullefors 2008: 64 [checklist].
 —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Chvojka et al. 2009: 82 [distribution]. —Višinskienė 2009: 27 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Crofts 2011: 72 [distribution]. —Ivanov 2011: 195 [checklist]. —Šemnički et al. 2011: 149 [distribution]. —Viidalepp et al. 2011: 196 [distribution]. —Komzák and Chvojka 2012: 720 [distribution]. —Lock and Goethals 2012: 28 [checklist]. —Wolf et al. 2012: 75 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Karaouzas and Malicky 2015: 14 [distribution]. —O'Connor 2015: 28, 84 [distribution]. —Dia 2015: 51 [distribution]. —Sipahiler 2016: 12 [distribution]. —Smirnova et al. 2016: 401 [distribution]. —Cianficconi et al. 2016: 141 [distribution]. —Pan'kov and Krasheninnikov 2016: 333 [distribution]. —Sipahiler 2016: 12 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 21, 24 [conservation status]. —Sipahiler 2017b: 12 [distribution]. —Melnitsky et al. 2017: 6 [distribution]. —Komzák and Kroča 2018: 166 [distribution]. —Sipahiler 2018: 41 [distribution].
 —*insignis* Martynov, 1927: 176 [type locality: [Kazakhstan?], Turkestan, River Boroldai, near the vill. Alexeievka, district Katchkar-ata, East Kara-tau; depository not designated; ♂]. —Martynov 1934: 143 [♂]. —Botosaneanu 1967: 294 [suggested synonym]. —Botosaneanu and Malicky 1978: 341 [to synonymy]. —Spuris 1989: 16 [checklist].
 —*kimminsi* Mosely, 1930b: 245 [type locality: France, Lozère, Mende; NHMUK; ♂]. —Schmid 1947: 531 [distribution]. —Nybom 1960: 18 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Marshall 1977: 119 [to synonymy]. —Spuris 1989: 16 [checklist].
 —*parthava* Schmid, 1959b: 686 [type locality: [Iran] Durb Adam (Ost. 9); CNC; ♂]. —Botosaneanu 1967: 294 [probable synonym]. —Botosaneanu and Malicky 1978: 341 [to synonymy]. —Lonsdale 2020: 38 [holotype depository].
Distribution. —Belgium, Bulgaria, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Kazakhstan, Lebanon, Lithuania, Norway, Poland, Romania, Russia, Scotland, Spain, Sweden, Switzerland, Turkey, Ukraine, Uzbekistan.
oemerueneli Sipahiler, 2003a: 20 [type locality: Turkey, Kastamonu, Pinarbasi, Varla Mahallesi, Devrekani Kanyonu, Devrekani Deresi, 41°36'N, 33°54'E; depository not designated; ♂]. —Malicky 2004a: 63 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution]. —Sipahiler 2007: 38 [distribution]. —Sipahiler 2008: 104 [checklist]. —Küçükbasmaci and Kiyak 2017: 488 [distribution].
Distribution. —Turkey.
ogasawaraensis Ito in Ito et al. 2011: 7 [type locality: Japan, Ogasawara Islands, Chichijima, Ogasawara-mura, a headwater of Yasse-gawa, 27°03'55"N 142°13'08"E; CBM-ZI, 210 m; ♂]. —Ito 2015: 8 [checklist]. —Tanida and Kuranishi 2016: 70 [checklist].
Distribution. —Japan.

oguranis Kobayashi, 1974: 68 [type locality: [Japan], Mt. Ogura, Shiroyama-Machi, Tsukuigun, Kanagawa Prefecture; depository not designated; ♂]. —Ito et al. 1993: 142 [checklist]. —Morse et al. 2001: 102 [distribution]. —Tanida et al. 2005: 441 [♂]. —Nozaki and Tanida 2007: 245 [distribution]. —Ito et al. 2011: 8 [♂, ♀; distribution]. —Ito 2015: 8, 15 [checklist]. —Tanida and Kuranishi 2016: 70 [checklist].

Distribution. —Japan, Russia.

okaloosa Harris, 2002: 53 [type locality: [United States], Florida, Okaloosa County, Rogue Creek, 0.6 km S Base Rd. 232, Eglin Air Force Base, 30°33'19"N, 86°34'52"W; NMNH; ♂]. —Harris et al. 2012: 7 [checklist].

Distribution. —U.S.A.

oknos Malicky, 2004b: 294 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, vom “östlicher” Bach, 320 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

oneili Harris, 1985b: 618 [type locality: [United States], Alabama, Bibb County, spring at Schutlz Creek Church, 2.5 miles southwest of West Blocton; NMNH; ♂]. —Harris et al. 1991: 194 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Moulton and Stewart 1996: 101 [♂; distribution]. —Etnier 2010: 485 [distribution].

Distribution. —U.S.A.

orion Malicky & Chantaramongkol, 2007: 1018 [type locality: Thailand, Tung Salaeng NP, 16°49'N 100°57'E, 600 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 19 [distribution]. —Malicky 2010a: 26 [atlas; ♂].

Distribution. —Thailand, Vietnam.

ornithocephala Yang & Xue, 1992: 27 [type locality: [China] Wudalianchi, Heilongjiang; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Morse et al. 2001: 102 [distribution]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution].

Distribution. —China, Russia.

ortaca Sipahiler, 1989: 129 [type locality: Turkey, Mugla, Fethiye, 10 km to Köycegiz, 29°02'N, 36°45'E; depository not designated; ♂]. —Malicky 2004a: 53 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution].

Distribution. —Turkey.

osa Harris & Holzenthal, 1999: 21 [type locality: Costa Rica, Puntarenas, Quebrada Pita, ca 3 km (air) W Golfito, 8.642°N 83.193°W; NMNH; ♂].

Distribution. —Costa Rica.

ouachita Holzenthal & Kelley, 1983: 468 [type locality: [United States], Louisiana, Jackson Parish, Schoolhouse Spring, T17N, R1W, Sec. 12; NMNH; ♂]. —Moulton and Stewart 1997: 350 [checklist].

Distribution. —U.S.A.

ovacikensis Sipahiler in Sipahiler and Malicky 1987: 86 [type locality: Turkey, Tunceli, 15 km NE Ovacik, Mercan Vadisi, Mollaaliler Köyü; type depository not given; ♂]. —Malicky 2004a: 64 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution].

Distribution. —Turkey.

palaestinae Botosaneanu & Gasith, 1971: 99 [type locality: [Israel], Beit She'an; TAU; ♂; ♀]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 49, 52 [atlas; ♂; ♀]. —Botosaneanu 1992: 69 [♂; ♀]. —Malicky 2004a: 61 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 61 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution].

Distribution. —Greece, Israel, Turkey.

panchaoi Schmid, 1960: 93 [type locality: [Pakistan] Himalaya, Kel; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Lonsdale 2020: 38 [holotype depository].

Distribution. —Pakistan.

parachelops Sykora & Harris, 1994: 69 [type locality: [United States], Pennsylvania, Fayette Co., Youghiogheny River Lake outflow near Confluence; CMNH; ♂].

Distribution. —U.S.A.

paradenza Harris & Holzenthal, 1999: 25 [type locality: Costa Rica, Limón, E.A.R.T.H., Río Destierra, Poza Azul, 10.208°N 83.574°W; NMNH; ♂]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Armitage et al. 2016: 7 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Costa Rica, Mexico, Nicaragua, Panama.

parakampsis Malicky, 2004b: 294 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, vom "östlicher" Bach, 320 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 501 [distribution]. —Malicky 2018: 49 [checklist].

Distribution. —Nepal.

paralatosa Harris, 1985b: 608 [type locality: [United States], Alabama, Tuscaloosa County, Hurricane Creek at Old Mill Trace, 1 mile south Cottondale; NMNH; ♂]. —Harris et al. 1991: 195 [distribution]. —Harris et al. 2012: 7 [distribution]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

paramoena Harris, 1985b: 616 [type locality: [United States], Alabama, Bibb County, Six Mile Creek at Hwy. 25; NMNH; ♂]. —Harris et al. 1991: 196 [distribution]. —Frazer et al. 1991: 20 [distribution].

Distribution. —U.S.A.

parapiculata Yang & Xue, 1994: 9 [type locality: [China], Sichuan, E-mei Mountain, Yu-jia River, Jie-tuo bridge; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist]. —Kobayashi et al. 2017: 17 [distribution]. —Ito and Shimura 2019: 32 [♂; distribution].

Distribution. —China, Japan.

parastrepha Kelley & Harris, 1983: 182 [type locality: [United States], Alabama, Mobile County, Puppy Creek at Co. Rd. 217, 7 miles southwest of Citronelle; NMNH; ♂]. —Harris et al. 1991: 197 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 7 [checklist].

Distribution. —U.S.A.

paraxella Harris & Armitage in Armitage et al. 2011: 34 [type locality: [United States], Ohio, Miami County, Charleston Falls, Charleston Falls Preserve, Miami County Park District, N39.91853, W84.1461; NMNH; ♂; ♀].

Distribution. —U.S.A.

parhuzam Oláh & Johanson, 2011: 125 [type locality: Peru, Pasco Reg., Yanachaga-Chemillen NP., side river to Rio Huancabamba, N end of park, along Oxabamba-Pozuzo rd., 10°11.133'S 75°34.106'W; NHRS; ♂].

Distribution. —Peru.

paschia Mosely, 1937b: 164 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Bueno-Soria 1984: 102 [♂; distribution]. —Holzenthal 1988: 61 [distribution]. —Harris and Holzenthal 1999: 45 [♂; distribution]. —Maes 1999: 1193 [checklist]. —Bueno-Soria et al. 2007: 33 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Ríos-Touma et al. 2017: 10 [distribution]. —Armitage and Harris 2018a: 9 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Costa Rica, Ecuador, Mexico, Nicaragua, Panama.

patriciae Harris, 1985a: 250 [type locality: [United States], Alabama, Bibb County, Little Schultz Creek at spring, 2.5 miles S West Blocton, T24N, R10E, S30; NMNH; ♂]. —Harris et al. 1991: 198 [distribution].

Distribution. —U.S.A.

pecos Ross, 1941a: 64 [type locality: [United States], New Mexico, Carlsbad, along bank of Pecos River; INHS; ♂]. —Denning 1947a: 151 [distribution]. —Blickle 1979: 49, 71 [checklist; ♂]. —Hamilton et al. 1983: 18 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Ruiter 1999: 165 [distribution]. —Blinn and Ruiter 2005: 68 [distribution; biology].

Distribution. —U.S.A.

pectinifera Schmid, 1970: 118 [type locality: [Mongolia], 8 km N von Somon Burenchaan, am Fluß Delger mörön, 1450 m; CNC; ♂]. —Morse et al. 2006: 321 [distribution]. —Chuluunbat et al. 2016: 102 [distribution].

Distribution. —Mongolia.

pedemontana Mey, 1995: 195 [type locality: [Philippines], Mindoro, Mamburao; Collection Mey; ♂]. —Wells and Mey 2002: 128 [distribution]. —Malicky and

Chantaramongkol 2007: 1023 [distribution]. —Malicky 2009b: 10 [distribution]. —Malicky 2013: 43 [possible senior synonym to *H. mindamontana*]. —Malicky 2014a: 1623 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —Philippines, Taiwan.

penthesileia Malicky & Chantaramongkol, 2007: 1019 [type locality: Thailand, Chiang Dao WRS, 19°22'N 98°55'E, 500 m; Collection Malicky; ♂]. —Malicky 2010a: 26 [atlas; ♂].

Distribution. —Thailand.

perdita Morton, 1905: 67 [type locality: [United States], Ithaca, New York; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Mosely 1923: 293 [scent-organ]. —Betten 1934: 160 [distribution]. —Ross 1944: 153 [♂; ♀; distribution]. —Denning 1947b: 174 [distribution]. —Etnier 1965: 147 [checklist]. —Unzicker et al. 1970: 172 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 49 [checklist]. —Huryrn and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Lake 1984: 220 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Tarter 1990: 239 [checklist]. —Harris et al. 1991: 199 [distribution]. —Floyd 1992: 50 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 101 [♂; distribution]. —Keiper and Foote 1999: 517 [biology; larva]. —Houghton et al. 2001: 504 [distribution]. —Zeullig et al. 2006: 43 [distribution]. —Flint 2011: 104 [distribution]. —Armitage et al. 2011: 14 [checklist]. —DeWalt et al. 2016: 51 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, U.S.A.

perimele Malicky, 2004b: 295 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, vom “westlicher” Bach, 320 m; Collection Malicky; ♂]. —Malicky 2006: 252 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

perplexa Mosely, 1923: 293 [type locality: [England] “Britain”; depository not designated; scent-organ]. —Milne 1936: 77 [as subspecies of *H. hamata*]. —Ross 1944: 296 [nomen dubium].

Distribution. —England.

phaon Malicky, 1976: 93 [type locality: Greece, Epirus, Ambelos, 600 m; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 49 [atlas; ♂]. —Valle 2001: 66 [distribution]. —Malicky 2002: 4 [distribution]. —Malicky 2004a: 61 [atlas]. —Malicky 2005b: 544 [checklist]. —Coppa and Tachet 2005: 125 [♂; ♀]. —Malicky 2005a: 61 [distribution]. —Malicky 2007b: 51 [checklist]. —Cianficconi et al. 2007b: 575 [distribution]. —Botosaneanu and

Giudicelli 2004: 15 [♀; distribution]. —Oláh 2010: 92 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Karaouzas and Malicky 2015: 14 [distribution]. —Cianficconi et al. 2016: 141 [distribution]. —Valle and Lodovici 2018: 146 [distribution]. —Kučinić et al. 2020: 80 [distribution].

Distribution. —Croatia, France, Greece, Italy, Spain.

phenianica Botosaneanu, 1970: 290 [type locality: [North Korea], Station 18, Phjongjang, le fleuve Tedong-gang; MZPW; ♂; ♀]. —Kumanski 1990: 48 [distribution]. —Arefina et al. 2002: 9 [distribution]. —Nozaki and Tanida 2007: 246 [distribution]. —Nozaki 2010: 22 [distribution]. —Oláh and Johanson 2010a: 21 [distribution]. —Ivanov 2011: 195 [checklist]. —Ito et al. 2011: 2 [♂; ♀; distribution]. —Hirabayashi et al. 2011: 145 [distribution]. —Ito and Nagasaka 2014: 9 [distribution]. —Ito 2015: 8, 13 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Tanida and Kuranishi 2016: 71 [checklist]. —Kimura et al. 2016: 246 [distribution]. —Nozaki et al. 2016: 324 [distribution]. —Kobayashi et al. 2017: 17 [distribution]. —Nozaki et al. 2019: 168 [distribution]. —Park and Kong 2020: 297 [checklist].

—*matsuii* Kobayashi, 1974: 67 [type locality: [Japan], Riv. Chikuma, Ueda City, Nagano Prefecture; depository not designated; ♂]. —Ito et al. 1993: 142 [checklist]. —Morse et al. 2001: 102 [distribution]. —Tanida et al. 2005: 441 [♂]. —Nozaki and Tanida 2007: 246 [to synonymy]. —Kimura et al. 2008: 264 [biology; distribution].

Distribution. —Japan, Korea, Russia.

† *phileos* Cockerell, 1920: 239 [type locality: [United States], Eocene (Green River) shales, “Cathedral Bluffs south of Little Tommies Draw at point where samples were taken”, Colorado; NMNH; ♂; in amber]. —Eskov et al. 2008: 78 [checklist].

Distribution. —Eocene amber.

phoeniciae Botosaneanu & Dia in Dia and Botosaneanu 1983: 128 [type locality: [Lebanon], Station 5, Nabaa Bâter ech Chouf, source et ruisseau dans le bassin du Nahr el Aouali et dans le massif de Niha, en aval du village Niha, 820 m; ZMUA; ♂; ♀]. —Botosaneanu 1992: 65 [♂, ♀]. —Malicky 1997: 144 [♂]. —Malicky 2004a: 59 [atlas]. —Malicky 2005b: 544 [checklist]. —Dia 2015: 51 [distribution].

Distribution. —Lebanon.

pintal Wells & Huisman, 1992: 99 [type locality: East Malaysia, Sabah, Tenom; NTM; ♂; ♀]. —Wells and Malicky 1997: 183 [distribution]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 21 [distribution]. —Malicky 2010a: 28 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Borneo, Indonesia, Malaysia.

poirrieri Holzenthal & Kelley, 1983: 469 [type locality: [United States], Mississippi, Clarke Co., Chunky Creek at dirt road, 7.1 km. BNW of Hwy. 11 in Enterprise; NMNH; ♂]. —Etnier 2010: 485 [distribution].

Distribution. —U.S.A.

portunus Malicky & Chantaramongkol, 2007: 1013 [type locality: Laos, Prov., Viangchan, Phou Khao Khouay NP, Tad Leuk, 90 km E Vientiane, 200 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 22 [distribution]. —Malicky 2010a: 30 [atlas; ♂]. —Laudee and Prommi 2011: 283 [distribution]. —Malicky et al. 2018: 1321–1323 [distribution].

Distribution. —Laos, Thailand, Vietnam.

poseidon Malicky & Chantaramongkol, 2007: 1014 [type locality: Thailand, Pu Pan NP, Kaengmoddaeng, 16°54'N 103°52'E, 400 m; Collection Malicky; ♂]. —Malicky 2010a: 26 [atlas; ♂].

Distribution. —Thailand.

potosina Bueno-Soria, 1984: 95 [type locality: Mexico, San Luis Potosi, Palitla; NMNH; ♂]. —Moulton and Stewart 1997: 350 [distribution]. —Denning and Blickle 1971: 164 [distribution; mis-identified as *H. arctia*]. —Beardsley 1971: 15 [distribution; as *H. arctia*]. —Moulton and Stewart 1997: 350 [checklist]. —Flint et al. 2003: 31 [♂; ♀; distribution; introduced to Hawaii; correction of previous misidentification of Hawaiian specimens]. —Bowles et al. 2007: 21 [distribution; biology]. —McIntosh et al. 2002: 569 [biology]. —McIntosh et al. 2003: 298 [biology].

Distribution. —Mexico, U.S.A.

priamos Malicky & Chantaramongkol, 2007: 1011 [type locality: Thailand, Kao Soi Dao NP, 13°06'N 102°12'E, 300 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 22 [distribution]. —Malicky 2010a: 26 [atlas; ♂].

Distribution. —Laos, Thailand.

producta Mosely, 1939a: 236 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂]. —Angrisano 1995a: 509 [distribution]. —Angrisano 1999: 32 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Dumas et al. 2009: 366 [distribution]. —Dumas and Nessimian 2012: 15 [checklist]. —Paprocki and França 2014: 45 [checklist].

Distribution. —Brazil, Uruguay.

prokris Malicky & Chantaramongkol, 2007: 1021 [type locality: Taiwan, Taitung co., Chulai, 23°08'N 121°07'E, 370 m; Collection Malicky; ♂]. —Malicky 2014a: 1623 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —Taiwan.

protera Ross, 1938a: 131 [type locality: [United States], Oklahoma, Turner Falls State Park, along Honey Creek; INHS; ♂]. —Blickle 1979: 49, 69 [checklist; ♂]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton and Stewart 1996: 101 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist].

Distribution. —U.S.A.

pseudseirene Ito, 2015: 9 [type locality: Japan, Ryukyu Islands, Ishigaki-jima, Shiraizu, Nagura-gawa, unnamed tributary, 24°24'44"N, 124°11'11"E, 95 m; CBMI-ZI; ♂; ♀]. —Tanida and Kuranishi 2016: 71 [checklist].

Distribution. —Japan.

psyche Malicky & Chantaramongkol, 2007: 1022 [type locality: Thailand, Doi Inthanon NP, Mae Klang bei 960 m, 18°32'N 98°34'E; Collection Malicky; ♂]. —Malicky 2010a: 32 [atlas; ♂]. —Bunlue et al. 2012: 15 [distribution].

Distribution. —Thailand.

pulchricornis Pictet, 1834: 224 [type locality: [Switzerland]; no holotype designated]. —Kolenati 1848: 10 [revision; distribution]. —Hagen 1864b: 234 [comments on larvae and case]. —Eaton 1873: 134 [♂; distribution; as *Phrixocoma*]. —McLachlan 1880: 513 [revision; ♂]. —Morton 1899b: 281 [distribution]. —Mosely 1919a: 396 [scent-organ]. —Mosely 1923: 292 [scent-organ]. —Martynov 1924: 43 [♂]. —Martynov 1934: 137 [♂]. —Mosely 1939b: 268 [♂]. —Kimmins 1943: 154 [distribution]. —Nybom 1960: 18 [checklist]. —Spuris 1962: 62, 68 [distribution]. —Moretti and Cianficconi 1963: 199 [androconial formation]. —Spuris 1964: 13 [distribution]. —Moretti et al. 1966: 88 [distribution; note on attraction to light]. —Botosaneanu 1967: 294 [distribution]. —Solem 1970b: 93 [distribution]. —Botosaneanu and Gasith 1971: 99 [distribution]. —Spuris 1972: 19, 22, 23, 26, 28, 29 [checklist]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 43, 52 [atlas; ♂; ♀]. —Wiberg-Larsen 1985: 40 [checklist]. —Kumanski 1985: 136, 138 [♂]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Spuris 1989: 16 [checklist]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Waringer 1989: 390 [distribution; ecology]. —Andersen et al. 1990: 26 [distribution]. —Andersen et al. 1990: 52 [distribution]. —Botosaneanu 1992: 63 [as synonym of *H. aegyptia*]. —Andersen et al. 1993b: 3 [distribution]. —Chvojka 1996: 131 [distribution]. —Nógrádi and Uherkovich 1998: 338 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Malicky 1999c: 96 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Nógrádi 2001: 83 [distribution; ♂]. —Gullefors 2002: 138 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Gullefors 2003: 194 [distribution]. —Malicky 2004a: 52, 64 [atlas]. —Malicky 2005: 544 [checklist]. —Gullefors 2005a: 119 [distribution]. —Gullefors 2005b: 138 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Chvojka and Komzák 2006: 358 [distribution]. —Schiess-Bühler and Rezbanyai-Reser 2006: 72 [distribution]. —Robert 2007: 82 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Višinskienė 2009: 27 [checklist]. —Ivanov 2011: 195 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —O'Connor 2013: 64 [distribution]. —Zuyderduyn and Tempelman 2013: 29 [distribution]. —Tempelman and Sanabria 2013b: 144 [distribution]. —O'Connor and O'Connor 2014: 273 [distribution]. —O'Connor 2015: 28, 84 [distribution]. —Pan'kov and Krasheninnikov 2016: 333 [distribution]. —Gullefors 2016: 155 [checklist]. —Morris 2016: 246 [distribution]. —Wallace 2016: 21, 23, 51 [conservation status]. —Graf et al. 2017: 48 [distribution]. —O'Connor and O'Connor 2018: 82 [distribution]. —Edmonds-Brown 2020: 91 [checklist].

Distribution. —Austria, Belarus, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Hungary, Ireland, Israel, Latvia, Netherlands, Norway, Romania, Russia, Scotland, Sweden, Switzerland.

pulestoni Flint, 1980b: 138 [type locality: Argentina, Pcia. Buenos Aires, Estancia Delta, near Balneario Monte Hermosa; NMNH; ♂; ♀]. —Flint 1982b: 35 [distribution]. —Angrisano 1995a: 509 [distribution]. —Mangeaud 1996: 154 [distribution]. —Angrisano 1999: 32 [checklist]. —Muzón et al. 2005: 57 [distribution]. —Angrisano and Sganga 2007: 32 [♂; distribution]. —Oláh and Johanson 2011: 126 [distribution]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina, Chile, Uruguay.

pullata Denning, 1947a: 150 [type locality: [United States], Wyoming, Bluegrass River, near Wheatland; ESUW; ♂; ♀; as *pullatus*]. —Blickle 1979: 49, 73 [checklist; ♂].

Distribution. —U.S.A.

pyreneus Malicky & Chantaramongkol, 2007: 1012 [type locality: Thailand, Loei prov., Phu Luang WS, 700–900 m; Collection Malicky; ♂]. —Malicky 2010a: 28 [atlas; ♂].

Distribution. —Thailand.

pythia Malicky & Chantaramongkol, 2007: 1015 [type locality: [Indonesia] Sumatra, Tinggi Raha, 3°09'N 98°48'E, 300 m; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 27 [atlas; ♂].

Distribution. —Indonesia.

quadrifida Wells, 1984: 266 [type locality: [Papua] New Guinea, SE., Kokoda, 400 m; BPBM; ♂]. —Neboiss 1986: 61 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

quinaria Wells & Dudgeon, 1990: 167 [type locality: Hong Kong, Tai Po Kao Forest stream; NHMUK; ♂; ♀]. —Yang et al. 2016: 476 [checklist].

Distribution. —Hong Kong.

quinola Ross, 1947: 147 [type locality: [Canada], Ontario, Costello Lake, Station 4, Algonquin Park; INHS; ♂]. —Etnier 1968: 191 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 49, 73 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Harris et al. 1982a: 510 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Harris et al. 1984: 108 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Morse et al. 1989: 22 [distribution]. —Harris et al. 1991: 200 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Floyd and Morse 1993: 177 [distribution]. —Floyd et al. 1993: 90 [phenology; distribution]. —Moulton and Stewart 1996: 102 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Floyd et al. 1997: 136 [distribution]. USA —Huyrn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Flint et al. 2009: 7 [distribution]. —Etnier 2010: 485 [distribution]. —Harris et al. 2012: 7 [distribution]. —Denson et al. 2016: 5 [distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

rabeh Malicky, Ivanov, & Melnitsky, 2011: 1492 [type locality: [Indonesia], Lombok, Kembangkuning, 4 km N Kotaraja, 490 m, 8°33'33"S, 116°25'23"E; ZIN; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

rastrilla Harris & Holzenthal, 1999: 32 [type locality: Costa Rica, Limón, Reserva Biológica Barbilla, Río Dantas, 15 km (rd) S Pacuarito, 9.994°N 83.443°W; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Panama.

recurvata Harris & Kelley, 1984: 572 [type locality: [United States], Alabama, Tuscaloosa County, Wallace Branch, 5 miles southeast of Berry; NMNH; ♂]. —Harris et al. 1991: 201 [distribution].

Distribution. —U.S.A.

reducta Yang & Xue, 1994: 11 [type locality: [China], Sichuan, Pingwu county, 19 km E of Pingwu, tributary of Fujiang River, 1090 m; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

remita Blickle & Morse, 1954: 124 [type locality: [United States], Durham, N. H.; INHS; ♂]. —Blickle 1979: 49, 65 [checklist; ♂]. —Etnier and Schuster 1979: 17 [distribution]. —Harris et al. 1982a: 511 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Harris et al. 1991: 202 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Floyd et al. 1993: 91 [phenology; distribution]. —Moulton and Stewart 1996: 102 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Abbott et al. 1997: 44 [distribution]. —Huryn and Harris 2000: 193 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Etnier 2010: 485 [distribution]. —Harris et al. 2012: 7 [checklist]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

rheni Ris, 1895: 241 [type locality: [Switzerland], am Rheinufer zwischen Rheinau und Ellikon (9 Exemplare); depository not designated; ♂]. —Ris 1897: 431 [distribution]. —Morton 1904: 325 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 51 [atlas; ♂]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 56 [atlas]. —Malicky 2005b: 544 [checklist]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Previšić et al. 2013: 8 [distribution].

Distribution. —Croatia, Slovenia, Switzerland.

rhodica Jacquemart, 1973: 11 [type locality: [Greece], Loutani; IRSNB; ♂; larva]. —Malicky 1983b: 49 [atlas; ♂]. —Malicky 2004a: 61 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution]. —Coppa and Tachet 2005: 128 [♂]. —Malicky 2005a: 62 [distribution]. —Karaouzas and Malicky 2016: 18 [distribution].

—*kumanskii* Malicky, 1974: 107 [type locality: [Greece], Kreta, Mithi; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 341 [checklist; to synonymy].

Distribution. —Greece, Turkey.

roberta Hamilton & Holzenthal, 1986: 165 [type locality: [United States], Georgia, Crawford County, Spring Creek below pond at Camp Eunice, approx. 5 miles SSE of Roberta (ca. 32°40'N, 83°59'W); NMNH; ♂].

Distribution. —U.S.A.

robusta Wells, 1978: 747 [type locality: [Australia] Victoria, Millgrove, Yarra River; NMV; ♂; ♀]. —Wells 1985b: 5 [larva; case]. —Neboiss 1986: 60 [atlas; ♂; ♀].

Distribution. —Australia.

roma Malicky & Chantaramongkol, 2007: 1013 [type locality: Thailand, Tung Salaeng NP, 16°49'N 100°57'E, 600 m; Collection Malicky; ♂]. —Malicky 2010a: 28 [atlas; ♂].

Distribution. —Thailand.

rono Ross, 1941a: 66 [type locality: United States, Utah, Huntsville; INHS; ♂; ♀]. —Ross and Spencer 1952: 47 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 49, 67 [checklist; ♂]. —Unzicker et al. 1982: 9 [checklist]. —Waltz and McCafferty 1983b: 354 [distribution]. —Waltz and McCafferty 1983c: 414 [distribution]. —Light and Adler 1983: 77 [distribution; biology]. —Hamilton et al. 1983: 18 [distribution]. —Bueno-Soria 1984: 93 [♂; distribution]. —Harper 1989: 541 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Moulton et al. 1994: 169 [distribution]. —Wiggins and Parker 1997: 794 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton 2001: 90 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Blinn and Ruiter 2005: 68 [distribution; biology]. —Blinn and Ruiter 2006: 332 [biology; distribution]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Vieira et al. 2009: 257 [distribution]. —Blinn and Ruiter 2013: 279, 291 [distribution; biology]. —Givens 2014: 158 [distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Canada, Mexico, U.S.A.

roperi Wells & Dostine, 2016: 592 [type locality: [Australia] Northern Territory, Roper River, McMinn Station; NTM; ♂].

Distribution. —Australia.

ruben Malicky, Ivanov, & Melnitsky, 2011: 1493 [type locality: [Indonesia], Bali, Munduk, Bali Cottages, 860 m, 8°15'48"S, 115°08'42"E; ZIN; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

ruffoi Moretti, 1981: 171 [type locality: [Italy], Abruzzi, Monti della Laga, Rio Castellana, 1070 m, Teramo; Collection Moretti; ♂]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 42 [atlas; ♂]. —Valle 2001: 67, 83 [distribution; ♀]. —Malicky 2004a: 51 [atlas]. —Cianficconi et al. 2004b: 330 [distribution]. —Cianficconi et al. 2005: 96 [habitat; distribution]. —Malicky 2005b: 544 [checklist]. —Cianficconi et al. 2007a: 67 [proposed as Italian endemic]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 141 [distribution]. —Valle and Lodovici 2018: 146 [distribution]. —Le Guellec et al. 2020: 139 [distribution].

Distribution. —France, Italy.

rumpun Wells & Huisman, 1992: 100 [type locality: West Malaysia, Genting Highlands, tributary Sg. Gombak; NTM; ♂]. —Wells and Malicky 1997: 184 [♂; distribution]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 24 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution]. —Malicky et

al. 2018: 1322, 1323 [distribution]. —Melnitsky et al. 2019: 539 [distribution]. —Malicky et al. 2019: 429 [distribution].

Distribution. —Indonesia, Malaysia, Thailand.

sabit Wells & Huisman, 1992: 106 [type locality: West Malaysia, Genting Highlands, Gombak, tributary Sg. Gombak; NTM; ♂]. —Wells and Malicky 1997: 184 [♂; distribution]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 25 [atlas; ♂]. —Malicky et al. 2018: 1322 [distribution].

—*phanla* Oláh & Johanson, 2010a: 20 [type locality: Laos, Luang Namcha Prov., Tong Om Village, UTM: 47Q 0750111 2321825, 552 m; NHRS; ♂]. —Malicky 2013: 43 [to synonymy].

Distribution. —Indonesia, Laos, Malaysia, Thailand.

saimbeyli Sipahiler, 2018: 38 [type locality: Turkey, Adana, 11 km south of Saimbeyli, Feke direction, Göksu River, 1000 m, 37°51'N, 35°59'E; HUAT; ♂].

Distribution. —Turkey.

salmo Ross, 1941a: 66 [type locality: [United States], Wisconsin, Trout Lake; INHS; ♂]. —Etnier 1965: 147 [distribution]. —Blickle 1979: 49, 69 [checklist; ♂]. —Roy and Harper 1979: 151 [distribution]. —Roy and Harper 1981: 105 [distribution]. —Ruiter 1999: 165 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 128 [checklist].

Distribution. —Canda, U.S.A.

sandersoni Mathis & Bowles, 1990: 88 [type locality: [United States], Arkansas, Stone County, Sylamore Creek, Gunner Pool Recreation Area; NMNH; ♂]. —Harris et al. 1991: 203 [distribution]. —Floyd 1992: 50 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 102 [♂; distribution]. —Etnier 2010: 485 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

sanghala Schmid, 1960: 95 [type locality: [Pakistan], Hindou-Kouch, Shogor; CNC; ♂]. —Schmid 1958c: 220 [as new species *nomen nudum*]. —Schmid 1959b: 686 [distribution]. —Malicky 1983b: 50 [atlas; ♂]. —Mirmoayed and Malicky 2002: 164 [checklist]. —Malicky 2004a: 62 [atlas]. —Malicky 2005b: 544 [checklist]. —Huang et al. 2005: 469 [distribution]. —Malicky 2006: 252 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2010a: 25 [atlas; ♂]. —Mattern 2015: 501 [distribution]. —Yang et al. 2016: 476 [checklist]. —Malicky 2018: 49 [checklist]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —China, Iran, Nepal, Pakistan, Thailand.

santarosa Harris, Rasmussen, & Denson, 2012: 3 [type locality: [United States], Florida, Santa Rosa Co., McCostill Mill Creek at Ebenezer Church Road, N30°55'06", W87°14'50"; NMNH; ♂].

Distribution. —U.S.A.

sarabae Harris, 2002: 52 [type locality: [United States], Florida, Okaloosa County, Rogue Creek, 0.6 km S Base Rd. 232, Eglin Air Force Base, 30°33'19"N, 86°34'51"W; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 7 [checklist].

Distribution. —U.S.A.

sarkos Oláh & Johanson, 2011: 126 [type locality: Peru, San Martin Prov., creek crossing rd. Tarapoto-Yurimaguas, ca. 30 km (rd.) NE Tarapoto, 6°24.904'S 76°18.756'W; NHRS; ♂].

Distribution. —Peru.

sauca Flint, 1980b: 141 [type locality: Argentina, Pcia. Buenos Aires, Rio Sauce Grande, Sierra de la Ventana; NMNH; ♂; ♀]. —Flint 1982b: 35 [distribution]. —Angrisano 1995a: 509 [distribution]. —Angrisano 1999: 32 [checklist]. —Angrisano and Sganga 2007: 32 [♂; distribution].

Distribution. —Argentina, Uruguay.

scamandra Neboiss, 1977: 41 [type locality: [Australia] Tasmania, Scamander River, Upper Scamander; NMV; ♂]. —Wells 1978: 751 [♂; ♀; distribution]. —Wells 1985b: 5 [larva; pupa; case]. —Neboiss 1986: 63 [atlas; ♂; ♀]. —Neboiss 2002: 52 [checklist]. —Oláh and Johanson 2010a: 22 [distribution].

Distribution. —Australia.

scheiringi Harris, 1986a: 609 [type locality: [United States], Alabama, Baldwin County, Pine Log Creek at Hwy. 59; NMNH; ♂]. —Harris et al. 1991: 204 [distribution]. —Harris et al. 2012: 7 [distribution].

Distribution. —U.S.A.

scolops Ross, 1938a: 128 [type locality: [United States], Illinois, Shawneetown; INHS; ♂]. —Ross 1944: 152 [♂; distribution]. —Etnier 1965: 147 [distribution]. —Blickle 1979: 49, 71 [checklist; ♂]. —Hamilton et al. 1983: 18 [distribution]. —Moulton and Stewart 1996: 103 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton et al. 2001: 504 [distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —U.S.A.

sederhana Wells & Huisman, 1992: 99 [type locality: East Malaysia, Sabah, 60 km W Lahad Datu, Sg. Segama, 04°58'N 117°48'E, 150 m; RMNH; ♂]. —Malicky 2010a: 33 [atlas; ♂].

Distribution. —East Malaysia.

segitiga Wells & Huisman, 1992: 98 [type locality: West Malaysia, Genting Highlands, tributary Sg. Gombak; NTM; ♂]. —Malicky 2010a: 27 [atlas; ♂].

Distribution. —West Malaysia.

seirene Malicky & Chantaramongkol, 2007: 1022 [type locality: Taiwan, Nantou co., W Tatung, 24°01'N 121°05'E, 880 m; Collection Malicky; ♂]. —Malicky 2014a: 1623 [checklist]. —Ito 2015: 8 [♂; distribution]. —Yang et al. 2016: 476 [checklist].

Distribution. —Taiwan.

selene Malicky, 2008a: 837 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 29 [atlas; ♂].

Distribution. —Indonesia.

selvatica Botosaneanu, 1977: 269 [type locality: Cuba, Oriente, Baire, petit tuisseau, affluent de Rio Brazo Seco, a Matias; NMNH; ♂]. —Botosaneanu 1979: 51 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 83 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

sengavi Schmid, 1960: 93 [type locality: [Pakistan] Karakoram, Gilgit; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —Pakistan.

serrata Morton, 1898: 108 [type locality: [Algeria]; NHMUK; ♂]. —Morton 1904: 325 [distribution]. —Kimmins 1957a: 108 [lectotype designation]. —Malicky 1981a: 183 [♂]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 44 [atlas; ♂]. —Botosaneanu and Dumont 1987: 119 [♂; ♀]. —Malicky and Lounaci 1987: 15 [checklist]. —Malicky 2004a: 55 [atlas]. —Malicky 2005b: 544 [checklist]. —Cianficconi et al. 2007a: 67 [proposed as Italian endemic]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 141 [distribution]. —*bifurcata* Mosely, 1930a: 178 [type locality: [France], Corsica, Corte; NHMUK; ♂; ♀]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1981a: 183 [suggested synonymy]. —Botosaneanu 1982a: 178 [as distinct species]. —Malicky 1988a: 21 [to synonymy]. —Cianficconi et al. 2002: 146 [distribution].

Distribution. —Algeria, Italy, France.

setigera Wells, 1984: 270 [type locality: [Papua] New Guinea, NE., Banz, Waghi Valley, 1500 m; BPBM; ♂]. —Neboiss 1986: 62 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

sidong Oláh, 1989: 285 [type locality: Vietnam, Tamdao, 200 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Zhou et al. 2009b: 356 [♂; distribution]. —Malicky 2010a: 23 [atlas; ♂]. —Yang et al. 2016: 476 [checklist].

—*tiani* Yang & Xue, 1992: 28 [type locality: [China] Yellow Mountain, Anhui; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Malicky 2013: 43 [to synonymy].

Distribution. —China, Vietnam.

sikanda González & Malicky, 1988: 66 [type locality: Espagne, Prov. Càdiz, Benamahoma, Arroyo del Descansadero, 400 m; depository not designated; ♂]. —González et al. 1990: 213 [checklist]. —Malicky 2004a: 55 [atlas]. —Malicky 2005b: 544 [checklist]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Spain.

silicula Flint & Reyes, 1991: 484 [type locality: Peru, Dept. Lambayeque, Río Saña, Saña near ruins of Corbacho; NMNH; ♂].

Distribution. —Peru.

simplex Nielsen in Berg 1948: 125 [type locality: [Denmark], Holløse; likely deposited at ZMUC; ♂]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 2005b: 544 [checklist]. —Malicky 2014b: 6 [teratological structures; possible junior synonym of *H. sparsa*].

Distribution. —Denmark.

simulans Mosely, 1919b: 391 [type locality: [England], river Test, Hampshire; no depository designated; ♂]. —Mosely 1919a: 395 [scent-organ]. —Tjeder 1930b: 201 [distribution]. —Racięcka 1936: 98 [distribution]. —Mosely 1939b: 260 [♂]. —Schmid 1959b: 691 [distribution (erroneously, according to Mirmoayed and Malicky 2002: 164)]. —Nybom 1960: 17 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Gasith 1971: 98 [distribution]. —Spuris 1972: 28, 30 [checklist]. —Malicky 1974: 122 [checklist]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 10 [♂; distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 46, 52 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Nógrádi 1985: 131 [distribution; ♂]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Tysse 1985: 84 [distribution]. —Kumanski 1985: 126 [♂]. —Nógrádi 1986: 139 [distribution]. —Sipahiler and Malicky 1987: 122, 129 [distribution]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Rojas-Camousseight and Tachet 1988: 310–314 [♀]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Spuris 1989: 16 [checklist]. —Krušnik 1991: 13 [distribution]. —Botosaneanu 1992: 63 [as synonym of *H. angustata*]. —Andersen et al. 1993b: 3 [distribution]. —Andersen et al. 1993a: 51 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Nógrádi 1994: 277 [♂; ♀]. —Maier et al. 1995: 147 [distribution]. —Brettfeld 1996: 127 [distribution]. —Malicky 1997: 144 [distribution; ♂]. —Peissner and Kappus 1998: 162, 164 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Valle 2001: 67 [distribution]. —Gullefors 2002: 138 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Mirmoayed and Malicky 2002: 164 [distribution correction]. —Cibaité 2003a: 10 [checklist]. —Gullefors 2003: 194 [distribution]. —Malicky 2004a: 57 [atlas]. —Malicky 2005b: 544 [checklist]. —Gullefors 2005b: 138 [distribution]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 62 [distribution]. —Coppa and Tachet 2005: 132 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Hohmann 2005: 106 [checklist]. —Gullefors 2006: 137 [distribution]. —Chvojka and Komzák 2006: 358 [distribution]. —Schiess-Bühler and Rezbanyai-Reser 2006: 72 [distribution]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Gullefors 2008: 64 [checklist]. —Višinskienė 2009: 27 [checklist]. —Neu 2010: 151 [♀]. —Cianficconi and Corallini 2010: 87 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Ivanov 2011: 195 [checklist]. —Cianficconi et al. 2011:

47 [distribution]. —Viidalepp et al. 2011: 196 [distribution]. —Lock and Goethals 2012: 28 [checklist]. —O'Connor 2013: 64 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Corallini et al. 2013b: 26 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —Malicky 2014b: 6 [teratological structures]. —Karaouzas and Malicky 2015: 14 [distribution]. —O'Connor 2015: 28, 86 [distribution]. —Sipahiler 2016: 13 [distribution]. —Cianficconi et al. 2016: 141 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Chvojka et al. 2016: 44 [distribution]. —Küttner et al. 2016: 179 [distribution]. —Sipahiler 2016: 13 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 21, 24 [conservation status]. —Sipahiler 2017b: 13 [distribution]. —O'Connor and O'Connor 2017b: 53 [distribution]. —Lock and van Butsel 2017: 33 [distribution; ♂; ♀]. —O'Connor and O'Connor 2018: 82 [distribution]. —O'Connor and Bond 2018: 193 [distribution]. —Sipahiler 2018: 41 [distribution]. —Kućinić et al. 2019: 450 [distribution]. —O'Connor 2020: 140 [distribution].

Distribution. —Austria, Belgium, Croatia, Czech Republic, Bulgaria, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Lithuania, Luxembourg, Norway, Romania, Russia, Slovenia, Sweden, Switzerland, Turkey.

simulauica Mey, 1998a: 555 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

singri Harris & Holzenthal, 1999: 34 [type locality: Costa Rica, Puntarenas, Río Singrí, ca 2 km (air) S Finca Helechales, 9.057°N 83.082°W; NMNH; ♂]. —Armitage et al. 2016: 7 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Costa Rica, Panama.

sinuosa Wells, 1978: 759 [type locality: [Australia] Queensland, Little Mulgrave River; ANIC; ♂]. —Neboiss 1986: 62 [atlas; ♂].

Distribution. —Australia.

sitahoan Malicky & Chantaramongkol, 2007: 1017 [type locality: [Indonesia] Sumatra, Tinggi Raja, 3°09'N 98°47'E, 1500 m; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 23 [atlas; ♂].

Distribution. —Indonesia.

skylla Malicky & Chantaramongkol, 2007: 1020 [type locality: Thailand, Tung Yaw, 19°08'N 98°39'E, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 25 [atlas; ♂].

Distribution. —Thailand.

spada Flint, 1991b: 47 [type locality: Colombia, Dpto. Antioquia, Quebrada Espadera, 7 km E Medellín, road to Sta. Elena; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Ríos-Touma et al. 2017: 10 [distribution].

Distribution. —Colombia, Ecuador.

spangleri Bueno-Soria, 1984: 113 [type locality: Guatemala, Matias de Galvez; NMNH; ♂].

Distribution. —Guatemala.

sparsa Curtis, 1834: 217 [type locality: [England], "Britain"; NMV; ♀]. —Stephens 1836: 152 [distribution]. —Eaton 1873: 133 [♂; ♀; distribution; as *Phrixocoma*]. —McLachlan 1880: 511 [revision; ♂; ♀]. —McLachlan 1884: 70 [distribution]. —Morton 1896: 102 [distribution]. —Ris 1897: 431 [distribution]. —Klapálek 1897: 1 [larva]. —Klapálek 1900b: 3 [distribution]. —Ris 1903: 16 [distribution]. —Morton 1904: 324 [distribution]. —Mosely 1919a: plate XVII [♂]. —Mosely 1919b: 395 [scent-organ]. —Martynov 1924: 42 [♂]. —Martynov 1934: 126 [♂]. —Racięcka 1936: 98 [♀; ♂]. —Mosely 1939b: 258 [♂]. —Berg 1948: table 14 [distribution]. —Schmid 1959b: 690 [distribution]. —Nybom 1960: 17 [checklist]. —Hanna 1961: 69 [larva; distribution]. —Neboiss 1963: 620 [lectoholotype designated]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Gasith 1971: 98 [distribution]. —Spuris 1972: 27, 30 [checklist]. —Szczęsny 1975: 41 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Mey 1978a: 122 [distribution]. —Moretti and Corallini-Sorcetti 1978: 36 [ecology]. —Kumanski 1979: 12 [♂; distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Moretti et al. 1981: 239 [ecology; distribution]. —Malicky 1983b: 46, 47, 52 [atlas; ♂; ♀]. —Moubayed and Botosaneanu 1985: 63 [distribution]. —Wiberg-Larsen 1985: 40 [checklist]. —Kumanski 1985: 120 [♂]. —Glapska 1986: 30 [distribution]. —Cooter 1987: 148 [distribution]. —Andersen and Wiberg-Larsen 1987: 168 [checklist]. —Sipahiler and Malicky 1987: 129 [distribution]. —Rojas-Camousseight and Tachet 1988: 311–314 [♀]. —Spuris 1989: 16 [checklist]. —Waringer 1989: 390 [distribution; ecology]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Krušnik 1991: 13 [distribution]. —Botosaneanu 1992: 61 [♂; ♀; wings]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Nógrádi 1994: 277 [♂ ♀]. —Haase 1994: 206 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Malicky 1997: 1345 [distribution; ♂]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Nógrádi and Uherkovich 1998: 338 [distribution]. —Peissner and Kappus 1998: 162 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Cianficconi et al. 1999a: 57 [distribution]. —Wiberg-Larsen and Karsholt 1999: 126 [distribution]. —Hohmann 1999: 35 [checklist]. —Malicky 1999c: 96 [distribution]. —Cianficconi et al. 1999b: 279 [distribution]. —Uherkovich and Nógrádi 2001: 95 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Cianficconi et al. 2002: 146 [distribution]. —Gullefors 2002: 138 [checklist]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Malicky 2004a: 57, 64 [atlas]. —Cianficconi et al. 2004a: 256, 258 [distribution; biology]. —Graf and Hutter 2004: 147 [distribution]. —Malicky 2005a: 62 [distribution]. —Berlin 2005: 129 [distribution]. —Malicky 2005b: 545 [checklist]. —Coppa and Tachet 2005: 132 [distribution]. —Graf et al. 2005: 55 [distribution]. —Sipahiler 2005: 397 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Hohmann 2005: 106 [checklist]. —Wiggers et al. 2006: 54 [distribution]. —Waringer and Graf 2006: 356 [distribution]. —Chvojka and Komzák 2006: 358

- [distribution]. —Mey 2006a: 159 [distribution]. —Schiess-Bühler and Rezbanyai-Reser 2006: 72 [distribution]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007b: 569, 576 [distribution]. —Berlin and Thiele 2007: 49 [checklist]. —Previšić et al. 2007: 184 [distribution]. —Szczęsny and Godunko 2008: 15 [checklist]. —González and Menéndez 2008: 188 [distribution]. —Waringer and Graf 2008: 142 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Višinskienė 2009: 27 [checklist]. —O'Connor and Bond 2009: 131 [distribution]. —Neu 2010: 151 [♀]. —Hohmann 2010: 40 [distribution]. —Ivanov 2011: 195 [checklist]. —Kučinić et al. 2011: 260, 263 [distribution; biology]. —Corallini and Cianficconi 2011: 628 [checklist]. —Valladolid et al. 2011: 501 [distribution]. —Cianficconi et al. 2011: 47 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Viidalepp et al. 2011: 196 [distribution]. —Komzák and Chvojka 2012: 720 [distribution]. —Kiss 2012: 28 [distribution]. —O'Connor 2013: 64 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Tempelman et al. 2013: 288 [distribution]. —Zuyderduyn and Tempelman 2013: 25 [distribution]. —Tempelman and Sanabria 2013a: 20 [distribution]. —Tempelman and Sanabria 2013b: 144 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —Mey 2014: 187 [distribution]. —O'Connor and O'Connor 2014: 273 [distribution]. —Malicky 2014b: 10 [teratological structures]. —Wolf and Angersbach 2014: 32 [distribution]. —Karaouzas and Malicky 2015: 14, 18 [distribution]. —O'Connor 2015: 28, 87 [distribution]. —Stanić-Koštrovan et al. 2015: 85 [distribution]. —Stojanović et al. 2015: 55 [distribution]. —O'Connor and O'Connor 2015: 203 [distribution]. —Dia 2015: 51 [distribution]. —Corallini and Bicchierai 2016: 151 [biology]. —Cianficconi et al. 2016: 142 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —O'Connor and O'Connor 2016: 166 [distribution]. —Gullefors 2016: 155 [checklist]. —Valle and Lodovici 2018: 146 [distribution]. —O'Connor and O'Connor 2018: 82 [distribution]. —Sipahiler 2018: 41 [distribution]. —Kučinić et al. 2019: 450 [distribution]. —Edmonds-Brown 2020: 90, 91 [life history; checklist]. —Kročá and Komzák 2020: 147 [distribution]. —O'Connor 2020: 140 [distribution]. —Navara et al. 2020: 46 [distribution].
- brunneicornis* Stephens, 1836: 152 [type locality: [England], near London; no type designated]. —Kolenati 1848: 106 [revision; distribution]. —Fischer 1961: 163 [to synonymy].
- recurva* Dalman [unpublished manuscript name mentioned in Kolenati 1848: 106; no further information known]. —Kolenati 1848: 106 [to synonymy with *brunneicornis*].

Distribution. —Algeria, Austria, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Israel, Italy, Lebanon, Luxembourg, Netherlands, Poland, Portugal, Republic of Croatia, Serbia, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine.

spatulata Morton, 1905: 66 [type locality: [United States], Ithaca, New York; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 160 [♂; distribution]. —Ross 1944: 148 [♂; larva; distribution]. —Denning 1947b: 173 [distribution]. —Etnier 1965: 147 [checklist]. —Roy and Harper 1975: 1083 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 49, 65 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Swegman et al. 1981: 132 [distribution]. —Roy and Harper 1981: 105 [distribution]. —Hury and Foote 1983: 790 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Harris et al. 1984: 108 [distribution]. —Lake 1984: 220 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Harris et al. 1991: 206 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Masteller 1993: 134 [distribution]. —Moulton and Stewart 1996: 103 [♂; distribution]. —Houghton et al. 2001: 504 [distribution]. —Etnier 2010: 485 [distribution]. —Houghton et al. 2011b: 5 [phenology; habitat; distribution]. —Flint 2011: 104 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Ruiter Boyule and Zhou 2013: 3 [distribution; DNA barcoding; larval-adult association]. —DeWalt et al. 2016: 51 [distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

sphinx Malicky & Chantaramongkol, 2007: 1017 [type locality: [Indonesia] Sumatra, Tinggi Raja, 3°09'N 98°47'E, 350 m; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 23 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

spinata Blickle & Morse, 1954: 123 [type locality: [United States], Lee, N. H.; INHS; ♂]. —Williams and Williams 1979: 2406 [distribution]. —Blickle 1979: 49, 67 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Swegman et al. 1981: 132 [distribution]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1991: 207 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Myers et al. 2011: 107 [distribution].

Distribution. —Canada, U.S.A.

spinosa Arefina & Armitage, 2003: 15 [type locality: [Russia] Central Sakhalin, middle part of Tým' River, 20 km SW from Yasnoye Village; IBSS-RAS; ♂; ♀]. —Ito et al. 2011: 12 [♂, ♀; distribution]. —Ivanov 2011: 195 [checklist]. —Malicky 2014a: 1610 [possible senior synonym to *Hydroptila introspinata*]. —Ito and Nagasaka 2014: 9 [distribution]. —Ito 2015: 8 [checklist]. —Vshivkova et al. 2016: 78, 79 [distribution]. —Tanida and Kuranishi 2016: 71 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution].

Distribution. —Japan, Russia.

spiralis Ito, 2015: 11 [type locality: Japan, Ryukyu Islands, Okinawa-jima, Kunigami-son, Yona, Yona-gawa, Heigi-hash, 26°45'41"N, 128°13'09"E, 33 m; CBMI-ZI; ♂; ♀]. —Tanida and Kuranishi 2016: 71 [checklist].

Distribution. —Japan.

spirula Bueno-Soria, 1984: 121 [type locality: Mexico, Michoacán, Carácuaro; NHMUK; ♂; senior homonym of *H. spirula* Wells & Mey, 2002: 126, replaced by *H. spirulatella* Wells & Mey, 2003: 427].

Distribution. —Mexico.

spirulatella Mey, 2003b: 427 [replacement name for *H. spirula* Wells & Mey, 2002: 126, preoccupied by *H. spirula* Bueno-Soria, 1984: 121] [type locality: [Philippines] Palawan, Cayasan, Babuyan Rivber, LF; ZMHB; ♂]. —Mey and Freitag 2020: 57 [distribution].

Distribution. —Philippines.

spurcaria Mey, 1998a: 553 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

srisungwan Malicky & Chantaramongkol, 2007: 1017 [type locality: Thailand, Mae Ping bei Ban Sop O Nok, 8 km S von Chiang Dao, 19°16'N 98°58'E, 370 m; Collection Malicky; ♂]. —Malicky 2010a: 31 [atlas; ♂].

Distribution. —Thailand.

starmuehlneri Marlier & Marlier, 1982: 17 [type locality: La Réunion, Station 80, même station que 29–30 [Route St. Benoît-Takamaka, ravine Sèche en amont du pont, 550 m, ruisseau torrentueux, sur rochers], chasse à la lumière; IRSNB; ♂; larva]. —Botosaneanu 2002a: 327 [♂].

Distribution. —Réunion.

stellifera Morton, 1893: 75 [type locality: Italy, Apennino Pistoiese; NHMUK; ♂]. —Kimmins 1957a: 108 [lectotype designation]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1981a: 183 [♂]. —Malicky 1983b: 44 [atlas; ♂]. —Malicky 2002: 4 [distribution]. —Malicky 2004a: 55 [atlas]. —Malicky 2005b: 545 [checklist]. —Cianficconi et al. 2007b: 576 [distribution]. —Cianficconi et al. 2007a: 67 [proposed as Italian endemic]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 142 [distribution].

Distribution. —Italy.

strepha Ross, 1941a: 68 [type locality: [United States], Pennsylvania, Athens, Susquehanna River; INHS; ♂]. —Etnier 1965: 147 [distribution]. —Blickle 1979: 49, 67 [checklist; ♂]. —Harris et al. 1982a: 511 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Moulton and Stewart 1996: 104 [♂; checklist]. —Harris and Huryn 2000: 80 [♂]. —Biondi 2010: 61 [distribution]. —Armitage et al. 2011: 14 [checklist].

Distribution. —U.S.A.

suanhom Malicky & Chantaramongkol, 2007: 1014 [type locality: Thailand, Prov. Loei, Ban Phangam, Suanhom WF, 17°03'N 101°46'E, 700 m; Collection Malicky; ♂]. —Malicky 2010a: 31 [atlas; ♂].

Distribution. —Thailand.

sudip Wells & Huisman, 1992: 97 [type locality: East Malaysia, Sarawak, Bako National Park, Sungai Delima; NTM; ♂]. —Malicky 2010a: 27 [atlas; ♂].

Distribution. —Malaysia.

sumanmalie Chantaramongkol & Malicky, 1986: 514 [type locality: [Sri Lanka], Provimz Sabaragamuwa, Maratenna, 7 mi N von Balangoda; MZLU; ♂].

Distribution. —Sri Lanka.

surinamensis Flint, 1974b: 64 [type locality: Suriname, Blanche Marie, falls behind camp; RMNH; ♂].

Distribution. —Suriname.

sykorai Harris, 2002: 56 [type locality: [United States], Florida, Gadsden County, headwaters of Quincy Creek, 7 km N Quincy at Florida A&M Research and Extension Center, 30°39'27"N, 84°36'50"W; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 7 [checklist].

Distribution. —U.S.A.

sylvestris Morton, 1898: 107 [type locality: [Scotland], near Aviemore, the shores of Loch Morlich, Glen More, Inverness-Shire, 1046 feet; depository not designated; ♂]. —Morton 1904: 325 [distribution]. —Mosely 1939b: 264 [♂]. —Kimmins 1943: 154 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 51, 52 [atlas; ♂; ♀]. —González et al. 1990: 214 [distribution]. —Malicky 2002: 4 [distribution]. —Malicky 2004a: 56, 64 [atlas]. —Malicky 2005b: 545 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Wallace 2016: 21, 23 [conservation status].

Distribution. —England, France, Scotland, Spain.

tacheti Coppa & Malicky, 2005: 19 [type locality: [Italy], Friuli, Cornino 180 m, fiume Tagliamento; Collection Malicky; ♂]. —Coppa and Tachet 2005: 132 [distribution]. —Wolf et al. 2012: 75 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 142 [distribution]. —Malicky 2016b: 22 [morphological comparison with *H. brissaga*].

Distribution. —France, Italy.

tagus de Jalón & González, 1985: 73 [type locality: [Spain], River Tajo in Peralejos de las Truchas (Guadalajara, España), 1.100 m; ETSI; ♂]. —Malicky 2004a: 56 [atlas]. —Malicky 2005b: 545 [checklist]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Spain.

takamaka Marlier & Marlier, 1982: 20 [type locality: La Réunion, Station 46, Premier village, plaine des Palmistes, Cascade Biberon, sur Grand Bras Patience, 950 m, au pied de la grande cascade, cuvette d'eau claire agitée, rochers ruisselants; IRSNB; ♂; larva]. —Botosaneanu 2002a: 328 [♂].

Distribution. —[Réunion].

talladega Harris, 1985b: 615 [type locality: [United States], Alabama, Cleburne County, unnamed tributary to Coleman lake, 3/4 mile northeast of Choccolocco Ranger Station (R10E, T14S, S27); NMNH; ♂]. —Morse et al. 1989: 22 [distribution]. —Harris et al. 1991: 208 [distribution]. —Frazer et al. 1991: 20

[distribution]. —Masteller and Flint 1992: 70 [distribution]. —Floyd et al. 1997: 136 [distribution]. —Houp 1999: 2 [distribution]. —DeWalt and Heinold 2005: 42 [phenology; distribution]. —Armitage et al. 2011: 14 [distribution; threatened].

Distribution. —U.S.A.

tanduka Wells, 1990b: 388 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Edwards Camp near Tumpah R.; NMV; ♂; ♀]. —Malicky et al. 2010: 163 [distribution].

Distribution. —Indonesia.

tannerorum Wells & Andersen, 1995: 160 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 7, 1535 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

tasmanica Mosely, 1934a: 147 [type locality: [Australia] Tasmania, Wilmot; Collection Tillyard (transferred to NHMUK according to Mosely and Kimmins 1953: 509); ♂]. —Mosely and Kimmins 1953: 509 [♂]. —Neboiss 1977: 40 [♂]. —Wells 1978: 749 [♂; ♀; distribution]. —Neboiss 1986: 6 [atlas; ♂; ♀]. —Neboiss 2002: 52 [checklist].

Distribution. —Australia.

taurica Martynov, 1934: 138 [type locality: [Ukraine]; depository not designated; ♂]. —Schmid 1959b: 687 [distribution]. —Botosaneanu and Sykora 1963: 126 [larva]. —Botosaneanu 1967: 294 [distribution]. —Malicky 1974: 122 [checklist]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 12 [♂; distribution]. —Malicky 1983b: 48 [atlas; ♂]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 132 [♂]. —Sipahiler and Malicky 1987: 112, 135 [distribution]. —Spuris 1989: 16 [checklist]. —Chvojka 1996: 131 [distribution]. —Malicky 1999f: 32 [note on distribution]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 60 [atlas]. —Urbanič 2004: 51 [distribution]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 63 [distribution]. —Malicky 2005b: 545 [checklist]. —Coppa and Tachet 2005: 130 [♀]. —Chvojka 2006: 253 [distribution]. —Sipahiler 2007: 38 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Szczęsny and Godunko 2008: 15 [checklist]. —Ciubuc 2009: 103 [distribution]. —Ivanov 2011: 195 [checklist]. —Karaouzas and Malicky 2015: 14 [distribution]. —Sipahiler 2016: 15 [checklist]. —Melnitsky et al. 2017: 6 [distribution]. —Sipahiler 2018: 41 [distribution].

Distribution. —Bulgaria, Czech Republic, Greece, Iran, Slovenia, Romania, Russia, Turkey, Ukraine.

terbela Wells, 1990b: 384 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Toraut R., 200 m above Tumpah R. junction; NMV; ♂; ♀]. —Wells and Huisman 2001: 210 [distribution]. —Malicky et al. 2010: 163 [distribution].

Distribution. —Indonesia.

tethys Malicky & Chantaramongkol, 2007: 1021 [type locality: Thailand, Than Than Lod NP, 99°20'E 14°46'N, 500 m; Collection Malicky; ♂]. —Malicky 2010a: 33 [atlas; ♂].

Distribution. Thailand.

- thaphena* Oláh, 1989: 280 [type locality: Vietnam, Tamdao, 200 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Malicky 2010a: 32 [atlas; ♂]. —Yang et al. 2016: 476 [checklist].
- triangula* Xue & Yang, 1990: 128 [type locality: Linxian Qihe, Henan; NAUJ; ♂]. —Xue et al. 1992: 353–356 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Oláh and Johanson 2010a: 22 [to synonymy].
- Distribution.** —China, Vietnam.
- tharsis* Malicky, 2008a: 837 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 33 [atlas; ♂].
- Distribution.** —Indonesia.
- theano* Malicky & Chantaramongkol, 2007: 1011 [type locality: Thailand, Huai Huat NP, 16°55'N 104°11'E, 400 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 22 [distribution]. —Malicky 2010a: 28 [atlas; ♂].
- Distribution.** —Thailand, Vietnam.
- theiodamas* Malicky & Chantaramongkol, 2007: 1018 [type locality: [Indonesia] Sumatra, Sitahoan, 2°39'N 99°00'E, 1500 m; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 23 [distribution]. —Malicky 2010a: 31 [atlas; ♂].
- Distribution.** —Indonesia.
- thersandros* Malicky & Chantaramongkol, 2007: 1015 [type locality: Thailand, Putoei NP, Ban Huai Hindam, 14°57'N 99°25'E, 400 m; Collection Malicky; ♂]. —Malicky 2010a: 30 [atlas; ♂].
- Distribution.** —Thailand.
- thiba* Oláh, 1989: 277 [type locality: Vietnam, Tamdao; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Oláh and Johanson 2010a: 23 [distribution]. —Malicky 2010a: 34 [atlas; ♂]. —Yang et al. 2016: 476 [checklist].
- Distribution.** —Hong Kong, Vietnam.
- thisa* Oláh, 1989: 279 [type locality: Vietnam, Hoabinh, 8 km from the city in the direction of Dabac; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Oláh and Johanson 2010a: 23 [distribution]. —Malicky 2010a: 32 [atlas; ♂].
- Distribution.** —Laos, Vietnam.
- thisbe* Malicky, 2008a: 837 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 33 [atlas; ♂].
- Distribution.** —Indonesia.
- thuna* Oláh, 1989: 281 [type locality: Vietnam, Hoabinh, 8 km from Hoabinh in the direction of Dabac; HNHM; ♂]. —Xue et al. 1992: 353–356 [distribution]. —Wells and Malicky 1997: 183 [♂; distribution]. —Armitage et al. 2005: 27 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 23 [distribution]. —Malicky

- 2010a: 24 [atlas; ♂]. —Ito et al. 2011: 5 [♂ ♀; distribution]. —Ivanov 2011: 195 [checklist; distribution]. —Laudee and Prommi 2011: 283 [distribution]. —Bunlue et al. 2012: 15 [distribution]. —Malicky et al. 2014c: 33 [distribution]. —Malicky 2014a: 1623 [checklist]. —Mattern 2015: 501 [distribution]. —Ito 2015: 8, 13 [distribution]. —Tanida and Kuranishi 2016: 71 [checklist]. —Yang et al. 2016: 476 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Malicky et al. 2019: 429 [distribution]. —Promwong and Thapanya 2019: 75 [distribution].
- triangularis* Wells & Dudgeon, 1990: 168 [type locality: Hong Kong, Tau Po Kau Forest Stream; NHMUK; ♂]. —Xue et al. 1992: 353–356 [to synonymy]. —Wells and Malicky 1997: 183 [also to synonymy]. —Malicky 2013: 42 [also to synonymy].
- apiculata* Yang & Xue, 1992: 26 [type locality: [China] Yangdian, Yixing, Jiangsu; NAUJ; ♂]. —Xue et al. 1992: 353–356 [to synonymy]. —Yang et al. 1997b: 93 [checklist]. —Arefina 2004: 210 [♂; ♀; distribution]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1023 [to synonymy].
- molione* Malicky, 2004b: 294 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), unweit des Wehrs des Babai Flusses, über das die Brücke der Ost-West-Hauptstraße Nepals (Mahindra Highway), 28°25'N, 81°23'E, 190 m; Collection Malicky; ♂]. —Malicky and Chantaramongkol 2007: 1023 [to synonymy]. —Oláh and Johanson 2010a: 23 [also to synonymy].
- Distribution.** —Cambodia, China, Hong Kong, Indonesia, Japan, Laos, Nepal, Russia, Taiwan, Thailand, Vietnam.
- tifica* Sipahiler, 2012b: 1051 [type locality: Turkey, Ordu, Niksar, Ünye direction, Gökçebayır village, Tifi stream, 914 m; HUAT; ♂; ♀].
- Distribution.** —Turkey.
- tigurina* Ris, 1894: 133 [type locality: [Switzerland], an den Pfeilern der Bahnhofbrücke in Zürich; depository not designated; ♂]. —Morton 1904: 325 [distribution]. —Mosely 1932: 176 [distribution]. —Mosely 1939b: 273 [♂]. —Kimmins 1943: 154 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —O'Connor 1978: 191 [distribution]. —Marshall 1979a: 213 [♀]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 51, 52 [atlas; ♂; ♀]. —González et al. 1990: 215 [distribution]. —Schmidt-Brücken 1996: 85 [distribution]. —Valle 2001: 67 [distribution]. —Malicky 2004a: 56, 64 [atlas]. —Malicky 2005a: 63 [distribution]. —Malicky 2005b: 545 [checklist]. —Sipahiler 2005: 397 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Sipahiler 2007: 38 [distribution]. —Cianficconi and Corallini 2010: 88 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —O'Connor 2015: 28, 89 [distribution]. —Martín et al. 2015: 75 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution].

—Cianficconi et al. 2016: 142 [distribution]. —Wallace 2016: 21, 23, 52 [conservation status]. —Küçükbasmaci and Kiyak 2017: 488 [distribution]. —Cerjanec et al. 2020: 13 [distribution].

Distribution. —Croatia, England, France, Germany, Greece, Ireland, Italy, Spain, Switzerland, Turkey.

tineoides Dalman, 1819: 126 [type locality: [Sweden], habitat in monte Kinnekulle ad littora lacus Wenneri; NHRS; ♂]. —Stephens 1836: 152 [distribution]. —Kolenati 1848: 105 [revision; distribution]. —McLachlan 1865: 94 [♂]. —Eaton 1873: 139 [revision]. —Forsslund 1955: 125 [topotype designation; distribution]. —Nybom 1960: 18 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Solem 1970a: 2 [distribution]. —Andersen 1974: 26 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 15 [♂; distribution]. —Malicky 1980a: 16 [checklist]. —Moretti et al. 1981: 350, 354 [biology; distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 43, 52 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Nógrádi 1985: 131 [distribution; ♂]. —Kumanski 1985: 134 [♂]. —Andersen and Tysse 1985: 84 [distribution]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Sipahiler and Malicky 1987: 114 [distribution]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Spuris 1989: 16 [checklist]. —Andersen et al. 1990: 52 [distribution]. —Krušnik 1991: 13 [distribution]. —Andersen et al. 1993a: 51 [distribution]. —Andersen et al. 1993b: 3 [distribution]. —Cianficconi et al. 1999a: 57 [distribution]. —Uherkovich and Nógrádi 1999: 421 [distribution]. —Gullefors 2002: 138 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Gullefors 2003: 195 [distribution]. —Malicky 2004a: 52, 64 [atlas]. —Malicky 2005b: 545 [checklist]. —Gullefors 2005a: 119 [distribution]. —Gullefors 2005b: 138 [distribution]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 63 [distribution]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Schiess-Bühler and Rezbanyai-Reser 2006: 72 [distribution]. —Gullefors and Johanson 2007: 64 [distribution]. —Sipahiler 2007: 38 [distribution]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007b: 569, 576 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Szczęsny and Godunko 2008: 15 [checklist]. —Ujvárosi et al. 2008: 112 [checklist]. —Baryshev 2008: 379 [ecology]. —Višinskienė 2009: 27 [checklist]. —Hohmann 2010: 40 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Cianficconi et al. 2011: 47 [distribution]. —Ivanov 2011: 195 [checklist]. —Komzák and Kroča 2011: 190 [distribution]. —Viidalepp et al. 2011: 196 [distribution]. —Andersen and Hagenlund 2012: 136 [distribution]. —Lock et al. 2013: 22 [distribution]. —O'Connor 2013: 64 [distribution]. —Corallini et al. 2013b: 26 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Zuyderduyn and Tempelman 2013: 29 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution]. —Stanić-Koštrovan et al. 2015: 85 [distribution]. —O'Connor 2015: 28, 90 [distribution].

- Pan'kov and Krasheninnikov 2016: 333 [distribution]. —Smirnova et al. 2016: 401 [distribution]. —Cianficconi et al. 2016: 142 [distribution]. —O'Connor and O'Connor 2016: 166 [distribution]. —Chuluunbat et al. 2016: 102 [distribution]. —Martín et al. 2016: 262 [distribution]. —Gullefors 2016: 155 [checklist]. —Graf and Leitner 2016: 37 [distribution]. —Sipahiler 2017b: 13 [distribution]. —Komzák and Kroča 2018: 167 [distribution]. —O'Connor and O'Connor 2018: 82 [distribution]. —Gullefors 2018: 108 [biology; distribution]. —Cerjanec et al. 2020: 13 [distribution]. —Edmonds-Brown 2020: 91 [checklist]. —Smirnova et al. 2020: 69 [distribution]. —Hansen and Gíslasen 2020: 132 [checklist].
- Phrixocoma femoralis* (Eaton, 1873): 136 [type locality: [England], The Dove, at Mappleton, Derbyshire, between the bridge and the weir; NHMUK; ♂; ♀]. —McLachlan 1880: 512 [revision; ♂; ♀]. —Morton 1896: 104 [distribution]. —Ris 1903: 16 [distribution]. —Siltala 1908: 14 [distribution]. —Mosely 1919a: 396 [scent-organ]. —Martynov 1924: 44 [♂]. —Martynov 1934: 138 [♂]. —Henriksen 1937: 2 [distribution]. —Mosely 1939b: 267 [♂]. —Kimmins 1943: 154 [distribution]. —Nielsen 1948: 62 [larva]. —Kimmins 1957a: 109 [lectotype designation]. —Fischer 1961: 169 [to synonymy]. —Spuris 1962: 62 [distribution]. —Spuris 1972: 19, 27, 29, 30 [checklist].
- longispina* McLachlan, 1884: 71 [type locality: England, Ambleside; NHMUK; ♂]. —King 1886: 290 [as var. of *femoralis*]. —Kimmins 1957a: 107 [lectotype designation]. —Fischer 1961: 169 [to synonymy].
- Distribution.** —Algeria, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Kazakhstan, Latvia, Mongolia, Netherlands, Norway, Portugal, Romania, Russia, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine.
- tobago** Botosaneanu in Botosaneanu and Alkins-Koo 1993: 27 [type locality: Tobago, streamlet, cut by road Roxborough-Parlatuvier, near summit; ZMUA; ♂; ♀]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Flint 1996b: 98 [distribution]. —Botosaneanu 2002b: 83 [checklist].
- Distribution.** —Tobago.
- tomah** Harris & Huryn, 2000: 77 [type locality: [United States], Maine, Washington County, Tomah Stream @ floodplain, N45°28.28', W67°35.58'; NMNH; ♂].
- Distribution.** —U.S.A.
- tombolhitam** Wells & Malicky, 1997: 185 [type locality: [Indonesia] N Sumatra, Huta Padang, 02°45'N 99°14'E; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 33 [atlas; ♂].
- Distribution.** —Indonesia.
- tong** Wells & Malicky, 1997: 182 [type locality: [Indonesia] N Sumatra, Sungai Aek Tarum, Labuan Julu near Aek Tarum, 2°42'18"N 99°22'31"E, 80 [m] asl; Collection Malicky; ♂]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 34 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].
- Distribution.** —Indonesia.

tortosa Ross, 1938a: 125 [type locality: [United States], Virginia, Luray; INHS; ♂]. —Etnier 1968: 191 [distribution]. —Blickle 1979: 49, 63 [checklist; ♂]. —Morse et al. 1989: 22 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Houghton and Holzenthal 2003: 37 [distribution; conservation status]. —Houghton et al. 2017: 63 [checklist].

Distribution. —U.S.A.

touromaya Schmid, 1960: 96 [type locality: [Pakistan] Penjab, Hassan Abdal; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Lonsdale 2020: 41 [holotype depository].

Distribution. —Pakistan.

traunica Wells, 1991: 504 [type locality: Papua New Guinea, West Highland Province, Baiyer River Sanctuary, Trauna River, 1160 m, 5°30'S 144°10'E; ANIC; ♂; ♀].

Distribution. —Papua New Guinea.

tridentata Holzenthal & Kelley, 1983: 470 [type locality: [United States], South Carolina, Dorchester Co., Four Holes Swamp, Goodsons Lake; NMNH; ♂].

Distribution. —U.S.A.

triloba Kimmins, 1957b: 300 [type locality: [Solomon Islands, Guadalcanal], Honiara; NHMUK; ♂]. —Wells 1984: 269 [distribution]. —Neboiss 1986: 62 [atlas; ♂; as *trilobata*]. —Wells 1991: 506 [distribution].

Distribution. —Papua New Guinea, Solomon Islands.

trilobata Jacquemart, 1965: 13 [type locality: [Turkey] collection data not provided; IRSNB; type specimen not designated; larva]. —Malicky 2005b: 545 [checklist].

Distribution. —Turkey.

trullata (Ulmer, 1951): 88 [type locality: [Indonesia], Sumatra, Tobagebiet, Bach südlich Balige; ZMUH; ♂; in *Sumatranotrichia*]. —Malicky 1998a: 797 [♂; distribution]. —Malicky and Chantaramongkol 2007: 1023 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 25 [atlas; ♂]. —Malicky 2013: 43 [possible senior synonym to *Hydroptila khonga*]. —Malicky et al. 2014a: 6 [distribution]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Indonesia, Malaysia, Thailand.

tulipa Oláh & Johanson, 2011: 127 [type locality: Peru, Dep. Lima, Pacaran, Province Canete, River Chillón Obrajillo, 12°52'05"S 76°02'60"W, 877 m; NHRS; ♂].

Distribution. —Peru.

tumpul Wells & Huisman, 1992: 105 [type locality: West Malaysia, Genting Highlands, Bukit Rengit; NTM; ♂]. —Malicky 2010a: 28 [atlas; ♂].

Distribution. —West Malaysia.

tungsalaeng Malicky & Chantaramongkol, 2007: 1015 [type locality: Thailand, Prov. Kanchanaburi, Erawan NP, 14°22'N 99°08'E, 200 m; Collection Malicky; ♂]. —Malicky 2010a: 30 [atlas; ♂].

Distribution. —Thailand.

tusculum Ross, 1947: 148 [type locality: [United States], Tennessee, Tusculum College, Green Co.; INHS; ♂; ♀]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 49, 71 [checklist; ♂]. —Harris et al. 1982a: 511 [distribution]. —Harris

et al. 1991: 1209 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 104 [♂; distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —U.S.A.

uncinata Morton, 1893: 77 [type locality: Italy, Apennino Pistoiese; NHMUK; ♂]. —Ris 1897: 416 [distribution]. —Mosely 1930a: 176 [distribution; ♂ scent-organ]. —Kimmins 1957a: 108 [lectotype designation]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1981a: 183 [♂]. —Malicky 1983b: 44 [atlas; ♂]. —Kumanski 1985: 129 [♂]. —Botosaneanu and Dumont 1987: 118 [♂]. —Malicky and Moretti 1987: 194 [♂]. —Malicky 2004a: 53 [atlas]. —Malicky 2005b: 545 [checklist]. —Cianficconi et al. 2007b: 569, 576 [distribution]. —Cianficconi et al. 2007a: 67 [proposed as Italian endemic]. —Corallini and Cianficconi 2011: 628 [checklist]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 143 [distribution]. —Valle and Lodovici 2018: 146 [distribution].

Distribution. —France, Italy, Switzerland.

unicuspis Flint, 1991b: 49 [type locality: Colombia, Dpto. Antioquia, Quebrada La Cebolla, El Retiro; NMNH; ♂; ♀]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

upulmalie Chantaramongkol & Malicky, 1986: 514 [type locality: [Sri Lanka], Western Province, Yakkala, 18 mi NE von Colombo (Dambowa Estate), 30 m; MZLU; ♂].

Distribution. —Sri Lanka.

usambarensis Wells & Andersen, 1995: 158 [type locality: Tanzania, Tanga region, West Usambara Mts, Dule, Bumbuli River, 1220 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

vala Ross, 1938a: 123 [type locality: [United States], Illinois, Herod; INHS; ♂]. —Ross 1944: 148 [♂; ♀; distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 49, 65 [checklist; ♂]. —Waltz and McCafferty 1983a: 10 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Harris et al. 1991: 210 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 105 [♂; distribution]. —Etnier 2010: 485 [distribution]. —Armitage et al. 2011: 14 [checklist].

Distribution. —U.S.A.

valesiaca Schmid, 1947: 530 [type locality: [Switzerland], Praz-de-Fort (Val Ferret, Valais); CNC; ♂]. —Botosaneanu 1967: 294 [distribution]. —Marshall 1977: 119 [revision; ♂; ♀]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Malicky 1983b: 48, 52 [atlas; ♂; ♀]. —Nelson and Panter 1984: 39 [distribution]. —Maier et al. 1995: 145 [distribution]. —Kahnert 1995: 124 [distribution]. —Chvojka 1996: 131 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 60 [atlas]. —Malicky 2005b: 545 [checklist]. —Weinzierl et al.

2005: 47 [distribution]. —Coppa and Tachet 2005: 130 [♀]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Chvojka and Komzák 2006: 358 [distribution]. —Robert 2007: 82 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —O'Connor and O'Connor 2013: 189 [distribution]. —O'Connor 2015: 28 92 [distribution]. —Wallace 2016: 21, 23 [conservation status]. —Lonsdale 2020: 41 [holotype depository].

Distribution. —Czech Republic, Germany, Ireland, Slovenia, Scotland, Switzerland.

valhalla Denning, 1947b: 175 [type locality: [United States], Minnesota, Taylors Falls; UMSP; ♂]. —Etnier 1965: 147 [checklist]. —Etnier 1968: 191 [distribution]. —Blickle 1979: 49, 71 [checklist; ♂]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Harris et al. 1991: 211 [distribution]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist].

Distribution. —U.S.A.

vanuatensis Johanson, Wells, Malm, & Espeland, 2011: 289 [type locality: [Vanuatu] Espiritu Santo, East Santo, Sarekata River, 300 m E Fanafao, 166 m, loc#15, 15°24.345'S 167°06.021'E; NHRS; ♂].

Distribution. —Vanuatu.

varla Sipahiler, 1996: 29 [type locality: Turkey, Kastamonu, Pinarbasi, Varla Mahallesi, Devrekani deresi; ZSM; ♂]. —Malicky 2004a: 63 [atlas]. —Malicky 2005b: 545 [checklist]. —Sipahiler 2005: 397 [distribution]. —Sipahiler 2007: 38 [distribution]. —Sipahiler 2008: 104 [checklist].

Distribution. —Turkey.

vazquezae Bueno-Soria, 1984: 105 [type locality: Mexico, Chiapas, Santa Elena, 50 km S Montebello; CNIN; ♂].

Distribution. —Mexico.

vectis Curtis, 1834: 217 [type locality: "Britain"; NVM; ♂]. —Stephens 1836: 152 [distribution]. —Neboiss 1963: 626 [lectoholotype designated; note on type locality]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Gasith 1971: 98 [distribution]. —Malicky 1974: 122 [checklist]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 14 [♂; distribution]. —Malicky 1980a: 16 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Mey 1981: 56 [distribution]. —González and Otero 1983: 118 [distribution]. —Malicky 1983b: 51, 52 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Moubayed and Botosaneanu 1985: 63 [distribution]. —Kumanski 1985: 140 [♂]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Sipahiler and Malicky 1987: 122 [distribution]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Usseglio-Polatera and Bournaud 1989: 254 [distribution]. —Spuris 1989: 16 [checklist]. —González et al. 1990: 213 [checklist]. —Krušnik 1991: 13 [distribution]. —Botosaneanu 1992: 84 [♂; ♀]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution].

- Uherkovich and Nógrádi 1999: 421 [distribution]. —Cianficconi et al. 1999a: 57 [distribution]. —Malicky 1999c: 96 [distribution]. —Cianficconi et al. 1999b: 279 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Gullefors 2002: 138 [checklist]. —Ujvárosi 2002: 384 [distribution]. —Cianficconi et al. 2002: 146 [distribution]. —Sipahiler 2003b: 33 [distribution]. —Malicky 2004a: 56, 64 [atlas]. —Bonada et al. 2004: 52 [distribution]. —Gullefors 2005b: 138 [distribution]. —Coppa and Tachet 2005: 132 [distribution]. —Sipahiler 2005: 397 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Malicky 2005b: 536, 543 [checklist; comparison with *H. corsicana*]. —Malicky 2005a: 64 [distribution]. —Graf et al. 2005: 55 [distribution]. —Hohmann 2005: 106 [checklist]. —Wiggers et al. 2006: 54 [distribution]. —Hughes 2006: 29 [biology]. —Voigt et al. 2006: 72 [distribution]. —Schiess-Bühler and Rezbanyai-Reser 2006: 72 [distribution]. —Gullefors and Johanson 2007: 64 [distribution]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007b: 569, 576 [distribution]. —Ivanov and Melnitsky 2007: 32 [distribution]. —Previšić et al. 2007: 184 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Gullefors 2008: 64 [checklist]. —Ujvárosi et al. 2008: 112 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Dohet et al. 2008: 45, 48 [distribution; ecology]. —Szczęsny and Godunko 2008: 15 [checklist]. —González and Menéndez 2008: 188 [distribution]. —Višinskienė 2009: 27 [checklist]. —Oláh 2010: 92 [distribution]. —Hohmann 2010: 40 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Valladolid et al. 2011: 501 [distribution]. —Cianficconi et al. 2011: 47 [distribution]. —Ivanov 2011: 195 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Wolf et al. 2012: 75 [distribution]. —Komzák and Chvojka 2012: 720 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Martín et al. 2014: 72 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —Martínez et al. 2015: 40 [distribution]. —Martín et al. 2015: 75 [distribution]. —Stojanović et al. 2015: 55 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution]. —Dia 2015: 51 [distribution]. —Pan'kov and Krashenninnikov 2016: 333 [distribution]. —Cianficconi et al. 2016: 143 [distribution]. —Küttner et al. 2016: 179 [distribution]. —Sekhi et al. 2016: 58 [distribution]. —Sipahiler 2016: 15 [checklist]. —Gullefors 2016: 155 [checklist]. —Ruiz-García et al. 2016: 4 [distribution]. —Sáinz-Bariáin et al. 2016: 676, 678 [ecology; distribution]. —Melnitsky et al. 2017: 6 [distribution]. —Valle and Lodovici 2018: 147 [distribution]. —O'Connor 2019a: 163 [distribution]. —O'Connor and O'Connor 2019: 232 [distribution]. —Dambri et al. 2020: 224 [distribution]. —Edmonds-Brown 2020: 91 [checklist]. —Mabrouki et al. 2020: 13 [distribution]. —Oláh et al. 2020: 46 [distribution]. —Navara et al. 2020: 46 [distribution]. —Smirnova et al. 2020: 68 [distribution].
- machlachlani* Klapálek, 1891: 177 [type locality: [Czech Republic]; depository not designated; ♂; larva]. —Klapálek 1893: 136 [larva]. —Morton 1893: 78 [distribution; ♂]. —Ris 1894: 133 [distribution]. —Morton 1896: 104 [distribution]. —Morton 1899a: 54 [distribution]. —Morton 1904: 325

- [distribution]. —Mosely 1919a: 395 [scent-organ]. —Martynov 1924: 45 [♂]. —Martynov 1934: 134 [♂; as *mclachlani*]. —Mosely 1939b: 271 [♂]. —Nybom 1948: 4 [distribution]. —Schmid 1960: 97 [distribution]. —Jacquemart and Coineau 1962: 61 [♂; larva]. —Nybom 1963: 114 [distribution]. —Neboiss 1963: 626 [to synonymy]. —Nybom 1965: 89 [distribution]. —Botosaneanu 1967: 294 [to synonymy].
- machlachlani* var. *corsicana* Mosely, 1930a: 176 [type locality: [France], Corsica, Corte; NHMUK; ♂]. —Botosaneanu 1967: 294 [distribution; as *corsicanus*]. —Malicky 2005b: 536, 543 [checklist; comparison with *H. vectis*]. —Malicky 2016a: 39 [to synonymy]. —Kročá and Komzák 2020: 147 [distribution].
- Distribution.** —Algeria, Austria, Bulgaria, Croatia, Czech Republic, England, Estonia, Finland France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Kazakhstan, Lebanon, Luxembourg, Morocco, Netherlands, Pakistan, Portugal, Romania, Serbia, Russia, Scotland, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, Uzbekistan.
- venezuelensis** Flint, 1981: 29 [type locality: Venezuela, Aragua, Maracay, Río Limón, Estacion Piscicultura; NMNH; ♂; ♀]. —Botosaneanu 2002b: 83 [checklist]. —Oláh and Johanson 2011: 128 [distribution]. —Ríos-Touma et al. 2017: 10 [checklist].
- Distribution.** —Ecuador, Venezuela.
- venus** Malicky & Chantaramongkol, 2007: 1016 [type locality: Malaysia, Perak, Belum exp. base camp, 5°30'N 101°26'E, 250 m; Collection Malicky; ♂]. —Malicky 2010a: 30 [atlas; ♂]. —Malicky et al. 2018: 1322 [distribution].
- Distribution.** —Malaysia, Thailand.
- veracruzensis** Flint, 1967b: 13 [type locality: Mexico, Vera Cruz, Cuitlahuac; NMNH; ♂]. —Bueno-Soria 1984: 116 [♂; distribution]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Botosaneanu and Alkins-Koo 1993: 24 [♂; ♀; distribution]. —Flint 1996b: 97 [distribution]. —Harris and Holzenthal 1999: 45 [♂; distribution]. —Maes 1999: 1193 [checklist]. —Botosaneanu and Vilorio 2002: 106 [distribution]. —Bueno-Soria et al. 2005: 75 [checklist]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Armitage et al. 2015b: 5 [distribution]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 4 [distribution].
- Distribution.** —Costa Rica, Mexico, Nicaragua, Panama, Trinidad, Venezuela.
- virginia** Malicky & Chantaramongkol, 2007: 1016 [type locality: Thailand, Erawan NP, 14°22'N 99°08'E, 200 m; Collection Malicky; ♂]. —Malicky 2010a: 23 [atlas; ♂].
- Distribution.** —Thailand.
- verticordia** Malicky & Chantaramongkol, 2007: 1021 [type locality: Thailand, Jaeson NP, 18°46'N 99°28'E, 500 m; Collection Malicky; ♂]. —Zhou et al. 2009b: 357 [distribution]. —Malicky 2010a: 29 [atlas; ♂]. —Yang et al. 2016: 476 [checklist]. —Malicky et al. 2018: 1322, 1323 [distribution].
- Distribution.** —China, Thailand.

vichtaspa Schmid, 1959b: 689 [type locality: Iran, Karasang (Ost. 2); CNC; ♂]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 14 [♂; distribution]. —Malicky 1981a: 183 [♂]. —Malicky 1983b: 44 [atlas; ♂]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 129 [♂]. —Botosaneanu and Dumont 1987: 116 [♂ ♀]. —Sipahiler and Malicky 1987: 107, 114, 129 [distribution]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 53 [atlas]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005b: 545 [checklist]. —Malicky 2005a: 65 [distribution]. —Sipahiler 2007: 38 [distribution]. —Cianficconi et al. 2007b: 569, 576 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Komzák and Chvojka 2012: 720 [distribution]. —Corallini et al. 2013a: 38 [checklist]. —Cianficconi et al. 2016: 144 [distribution]. —Lonsdale 2020: 41 [holotype depository].

Distribution. —Bulgaria, Cyprus, Czech Republic, Greece, Iran, Italy, Portugal, Turkey.

victoria Malicky & Chantaramongkol, 2007: 1020 [type locality: Taiwan, Pinglung co., E Shihtzu, 22°14'N 120°49'E, 370 m; Collection Malicky; ♂]. —Malicky 2014a: 1623 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —Taiwan.

viganoi Botosaneanu, 1974: 160 [type locality: [Israel], Walladja, dans les Mts. de Judée, pas loin du village Amminadav; TAU; ♂]. —Malicky 1983b: 51 [atlas; ♂]. —Botosaneanu 1992: 87 [♂]. —Malicky 2004a: 56 [atlas]. —Malicky 2005b: 545 [checklist].

Distribution. —Israel.

vilaverde Malicky & González, 1981: 151 [type locality: [Spain], Provinz la Coruna, Vilaverde, Rio Allones; depository not designated; ♂]. —Malicky 1983b: 45 [atlas; ♂]. —Malicky 2004a: 54 [atlas]. —Malicky 2005b: 545 [checklist]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Portugal, Spain.

virgata Ross, 1938a: 125 [type locality: [United States], Illinois, Herod; INHS; ♂]. —Ross 1944: 148 [♂; ♀; distribution]. —Etnier 1965: 147 [distribution]. —Unzicker et al. 1970: 172 [distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Roy and Harper 1979: 151 [distribution]. —Blickle 1979: 49, 63 [checklist; ♂]. —Huryn and Foote 1983: 790 [distribution]. —Lake 1984: 220 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Harris et al. 1991: 212 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 105 [♂; distribution]. —Armitage et al. 2011: 14 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, U.S.A.

vitcona Oláh & Johanson, 2010a: 24 [type locality: Vietnam, Lamdong Province, Baoloc, loc. Chau stream; Collection Oláh; ♂]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Malaysia, Vietnam.

- vittata** Wells, 1984: 267 [type locality: [Papua] New Guinea, Bulolo River, 950 m; BPBM; ♂; ♀]. —Neboiss 1986: 64 [atlas; ♂; ♀]. —Wells 1991: 506 [distribution].
Distribution. —Papua New Guinea.
- voticia** Malicky, 1992a: 146 [type locality: [Comoros], Anjouan, Oberlauf-Zufluß des Riv. Mutsamudu, 500 m; HM or IRSNB; ♂].
Distribution. —the Comoros.
- wakulla** Denning, 1947a: 19 [type locality: [United States], Florida, Wakulla Springs; ESUW; ♂; ♀]. —Blickle 1979: 49, 69 [checklist; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 7 [♂; checklist].
Distribution. —U.S.A.
- warisa** Wells, 1984: 266 [type locality: [Western New Guinea], Irian Jaya (New Guinea), Waris; BPBM; ♂]. —Neboiss 1986: 64 [atlas; ♂; ♀]. —Wells 1991: 507 [distribution].
Distribution. —Indonesia.
- waskesia** Ross, 1944: 276 [type locality: [Canada], Saskatchewan, Lake Waskesieu, Prince Albert National Park; INHS; ♂]. —Etnier 1968: 191 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 49, 67 [checklist; ♂]. —Huryn and Foote 1983: 790 [distribution]. —Harris et al. 1984: 108 [distribution]. —Harris et al. 1991: 213 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Houp 1999: 2 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Armitage et al. 2011: 14 [checklist].
Distribution. —Canada, U.S.A.
- waubesiana** Betten, 1934: 160 [type locality: [United States]; depository not designated; ♂]. —Ross 1944: 150 [♂; ♀; larva; distribution]. —Denning 1947b: 173 [distribution]. —Denning 1947a: 19 [distribution]. —Etnier 1965: 147 [checklist]. —Unzicker et al. 1970: 172 [distribution]. —Resh et al. 1978: 383 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 49, 65 [checklist; ♂]. —Swegman et al. 1981: 139 [distribution]. —Parker and Voshell 1981: 4 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1982a: 511 [distribution]. —Huryn and Foote 1983: 790 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Harris et al. 1984: 108 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Lake 1984: 220 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Harris et al. 1991: 214 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Bowles and Mathis 1992: 32 [distribution; as *wausbesiana*]. —Mathis and Bowles 1992: 24 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Moulton et al. 1993: 21 [distribution]. —Masteller 1993: 134 [distribution]. —Moulton and Stewart 1996: 106 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Keiper et al. 1998b: 87 [biology]. —Stewart et al. 1998: 872 [distribution; biology]. —Houghton et al. 2001: 504 [distribution].

—Pescador et al. 2004: 133 [checklist]. —Zeullig et al. 2006: 43 [distribution].
 —Bowles et al. 2007: 21 [distribution; biology]. —Flint 2011: 104 [distribution].
 —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2011b: 5 [distribution;
 biology]. —Harris et al. 2012: 7 [checklist]. —Denson et al. 2016: 5 [distribution].
 —DeWalt et al. 2016: 51 [distribution]. —Houghton 2016: 46 [biology].
 —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, U.S.A.

wetumpka Harris, 1991: 13 [type locality: [United States], Alabama, Elmore County, Corn Creek at Hwy. 14, 4.8 km ENE Wetumpka (Sec. 9, T 18 N, R 19 E); NMNH; ♂]. —Harris et al. 1991: 215 [distribution]. —Harris et al. 2012: 8 [distribution].

Distribution. —U.S.A.

wuchangensis Wang, 1963: 56 [type locality: [China], Lake Tunghu, Wuchang; depository not designated; ♂; ♀; larva]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

wyomia Denning, 1947a: 150 [type locality: [United States], Wyoming, Laramie, Laramie River; ESUW; ♂]. —Roy and Harper 1979: 151 [distribution]. —Blickle 1979: 49, 63 [checklist; ♂]. —Roy and Harper 1981: 105 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Harper 1989: 541 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Houghton et al. 2011b: 5 [phenology; habitat; distribution]. —Houghton 2016: 46 [biology; as *wyomyia*]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

xella Ross, 1941a: 65 [type locality: [United States], Tennessee, Martin Springs; INHS; ♂]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 49, 63 [checklist; ♂]. —Harris et al. 1991: 216 [distribution]. —Armitage et al. 2011: 36 [♂; ♀].

Distribution. —U.S.A.

xera Ross, 1938a: 132 [type locality: [United States], Wyoming, Parco, along North Platte River; INHS; ♂]. —Denning 1947a: 152 [♀; distribution]. —Ross and Spencer 1952: 47 [distribution]. —Roy and Harper 1979: 151 [distribution]. —Blickle 1979: 49, 69 [checklist; ♂]. —Harper 1989: 541 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Zack et al. 2006: 134 [phenology; distribution]. —Vieira et al. 2009: 257 [distribution]. —Houghton et al. 2011b: 5 [phenology; habitat; distribution]. —Blinn and Ruiters 2013: 280, 291 [biology; distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 118 [checklist]. —Houghton and Lardner 2020: 42 [distribution].

Distribution. —Canada, U.S.A.

xoncla Ross, 1941b: 16 [type locality: [Canada], Moser River, Nova Scotia, Gold Mine River; INHS; ♂]. —Roy and Harper 1875: 1083 [distribution]. —Roy and

Harper 1979: 151 [checklist]. —Blickle 1979: 49, 69 [checklist; ♂]. —Roy and Harper 1981: 105 [distribution]. —Lake 1984: 220 [distribution]. —Huryn and Harris 2000: 193 [distribution]. —Myers et al. 2011: 107 [distribution].

Distribution. —Canada, U.S.A.

yaeyamensis Ito, 2015: 13 [type locality: Japan, Ryukyu Islands, Ishigaki-jima, Shiramizu, Nagura-gawa, unnamed tributary, 24°24'44"N, 124°11'11"E, 95 m; CBMI-ZI; ♂; ♀]. —Tanida and Kuranishi 2016: 71 [checklist].

Distribution. —Japan.

zairiensis Statzner, 1977: 399 [type locality: Zaire, Kivu Region, Kalengo stream 10 km west of Lake Kivu; ZMHB; ♂; ♀].

Distribution. —Congo.

zerbinae de Souza, Santos, & Takiya, 2014b: 641 [type locality: Brazil, Pernambuco, Vicência Cachoeira do Engenho Embú, 07°37'22"S 35°22'51"W, 186 m; DZRJ; ♂].

Distribution. —Brazil.

zeus Malicky & Chantaramongkol, 2007: 1012 [type locality: Nepal, Chitwan NP, Temple Tiger Lodge, 27°32'N 84°04'E, 150 m; Collection Malicky; ♂]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

ziddensis Ivanov, 1992: 236 [type locality: [Tajikistan], Hissar Mountains, k. Ziddy, on the poplar and grass; ZIN; ♂].

Distribution. —Tajikistan.

Genus *Jabitrichia* Wells, 1990

Jabitrichia Wells, 1990c: 108 [type species: *Jabitrichia dostinei* Wells, 1990c, original designation]. —Kjærandsen and Andersen 2002: 134 [revision; key to males].

The genus *Jabitrichia* contains four species recorded from northern Australia, Malaysia, Thailand, Angola, and Ghana. *Jabitrichia* shares morphological similarities with both *Hydroptila* and *Oxyethira*, but differs enough that the definition of either genus would have required considerable modification to accommodate the addition (Wells 1990c). *Jabitrichia* and *Hydroptila* share a spur formula (0, 2, 4), a lack of ocelli, similar pattern of wing color, and form of thoracic scutella, while *Jabitrichia* and *Oxyethira* share a forewing without a jugal lobe, the general form of the female genitalia, and reductions of particular structures of the male genitalia (Wells 1990c). In their morphological analysis, Kjærandsen and Andersen (2002) placed the genus as sister to *Oxyethira*. The larval stage is unknown.

dostinei Wells, 1990c: 109 [type locality: Northern Territory, Alligator Rivers region, Gulungul Creek at inlet to Gulungul Billabong, 12°38'S 132°53'E; NTM; ♂]. —Kjærandsen and Andersen 2002: 137 [♂; ♀; distribution].

Distribution. —Australia.

flagellum (Marlier, 1965): 69 [type locality: [Angola] Moxico, Zambèze, Rives du Lac Calundo, Loc. 4510; MDLA; ♂; in *Orthotrichia*]. —Kjærandsen and Andersen 2002: 141 [to *Jabitrachia*]. —Wells and de Moor 2020: 512 [checklist].

Distribution. —Angola.

voltensis Kjærandsen & Andersen, 2002: 138 [type locality: Ghana, Eastern region, Volta River, Kpong; ZMUB; ♂].

Distribution. —Ghana.

wellsae O'Connor & Ashe, 1992: [type locality: Malaysia, Tasek Bera, 03°08'N 102°36'E; NMID; ♂]. —Kjærandsen and Andersen 2002: 138 [♂]. —Malicky and Chantaramongkol 2007: 1024 [distribution]. —Malicky 2010a: 39 [atlas; ♂].

Distribution. —Malaysia, Thailand.

Genus *Kholaptila* Malicky & Chantaramongkol, 2007

Kholaptila Malicky & Chantaramongkol, 2007: 1024 [type species: *Kholaptila serrata* Malicky & Chantaramongkol, 2007, original designation].

The monotypic genus *Kholaptila* is recorded from Nepal. Malicky and Chantaramongkol (2007) placed the genus in Hydroptilinae based on the absence of the transverse suture of the mesoscutellum. There are some similarities between *Kholaptila* and *Microptila* in the male genitalia (Malicky and Chantaramongkol 2007). The larvae are unknown.

serrata Malicky & Chantaramongkol, 2007: 1025 [type locality: Nepal, Dakhi Khola bei Kurin Ghat, 27°52'N 84°38'E, 300 m; Collection Malicky; ♂]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

Genus *Maeyaptila* Malicky & Chantaramongkol, 2007

Maeyaptila Malicky & Chantaramongkol, 2007: 1025 [type species: *Maeyaptila xuthos* Malicky & Chantaramongkol, 2007, original designation].

The monotypic genus *Maeyaptila* occurs in Thailand. Malicky and Chantaramongkol (2007) placed the genus in Hydroptilinae due to the absence of the transverse suture of the mesoscutellum, the spur formula (0, 2, 4), the lack of ocelli, and the general structure of the male genitalia. They also noted, however, that some of the genitalic structures are also similar to those of *Scelotrichia*, a member of Stactobiinae, making the placement somewhat tenuous (Malicky and Chantaramongkol 2007). The larval stage is unknown.

xuthos Malicky & Chantaramongkol, 2007: 1025 [type locality: Thailand, Prov. Mae Hong Son, Oberlauf des Huai Mae Ya bei Doi Mae Ya, 19°14'N 98°35'E, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 22 [atlas; ♂].

Distribution. —Thailand.

Genus *Microptila* Ris, 1897

Microptila Ris, 1897: 416 [type species: *Microptila minutissima* Ris, 1897, monotypic].
 —Marshall, 1979b: 197 [generic review]. —Graf et al. 2004: 31 [larva of type species]. —Ito 2017a: 104 [generic review].

The genus *Microptila* consists of 20 species occurring in the West Palaearctic faunal region. Marshall (1979b) commented that adult *Microptila* bear similarities with those of the genus *Dhatrichia*. The larvae of *M. minutissima* were described by Graf et al. (2004).

apsara Schmid, 1960: 87 [type locality: [Pakistan] Himalaya, Balakot; CNC; ♂].
 —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Kjærandsen and Ito 2009: 178 [checklist]. —Lonsdale 2020: 32 [holotype depository].

Distribution. —Pakistan.

atlantis Malicky & Chantaramongkol, 2007: 1027 [type locality: Nepal, Mahdev Khola, 27°53'N, 85°39'E, 1300 m; Collection Malicky; ♂]. —Kjærandsen and Ito 2009: 178 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

bejela Mosely, 1948b: 82 [type locality: [Yemen], Western Aden Protectorate, Jebel Jihaf, Wadi Leje, c. 6300 ft; NHMUK; ♂; ♀]. —Botosaneanu 1973: 69 [taxonomic note]. —Malicky 1983b: 57 [atlas; ♂; ♀]. —Malicky 2004a: 66 [atlas]. —Malicky 2005b: 547 [checklist]. —Kjærandsen and Ito 2009: 178 [checklist]. —Oláh and Kovács 2018: 180 [♂].

Distribution. —Yemen.

chora Malicky & Chantaramongkol, 2007: 1027 [type locality: Nepal, Mahadev Khola, 27°53'N, 85°39'E, 1300 m; Collection Malicky; ♂]. —Kjærandsen and Ito 2009: 178 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

dironga Oláh & Johanson, 2010: 26 [type locality: Vietnam, Lamdong Province, Baoloc, Baco stream; Collection Oláh; ♂].

Distribution. —Vietnam.

feredougoubae (Gibon, 1987a): 123 [type locality: sur la FéréDougouba (bassin du Sassandra; Côte d'Ivoire); MNHN; ♂; in *Dhatrichia*]. —Kjærandsen and Andersen 1997: 244 [distribution]. —Kjærandsen 2004: 9 [to *Microptila*]. —Kjærandsen and Ito 2009: 178 [checklist].

Distribution. —Côte d'Ivoire, Ghana.

genka Ito, 2017a: 107 [type locality: Japan, Ryukyu Islands, Okinawa-jima, Nago-shi, Genka, hygropetric zone near Hogen-hashii, 26°36'16"N, 128°04'29"E, 65 m a.s.l.; CMB-ZI; ♂; ♀].

Distribution. —Japan.

hamatilis Zhou, Yang, & Morse, 2016: 208 [type locality: China, Yun-nan Province, Da-li City, Zhong-he Village, N25.35°, E100.13°, alt. 2200 m; NAUJ; ♂].

Distribution. —China.

hintama Oláh, 1989: 271 [type locality: Vietnam, Hoabinh, 20 km from the city in the direction of Tanlac, singled along a small stream under trees; Collection Oláh; ♂]. —Armitage et al. 2005: 27 [checklist]. —Oláh and Johanson 2010: 26 [distribution]. —Malicky and Chantaramongkol 2007: 1026 [♂; distribution]. —Kjærandsen and Ito 2009: 178 [checklist]. —Malicky 2010a: 37 [atlas; ♂]. —Bunlue et al. 2012: 15 [distribution].

—***xedapa*** Oláh, 1989: 271 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; Collection Oláh; ♂]. —Armitage et al. 2005: 27 [checklist]. —Malicky and Chantaramongkol 2007: 1026 [to synonymy].

Distribution. —Thailand, Vietnam.

ikaros Malicky, 2004b: 295 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), von hygropetrischen Stellen entlang der Straße bei Babai Bazar; Collection Malicky; ♂]. —Malicky 2006: 253 [checklist]. —Kjærandsen and Ito 2009: 178 [checklist]. —Mattern 2015: 501 [distribution]. —Oláh and Kovács 2018: 180 [♂].

Distribution. —Nepal.

indra Schmid, 1960: 88 [type locality: [Pakistan] Karakoram, Shinghai Gan; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Kjærandsen and Ito 2009: 178 [checklist]. —Oláh and Kovács 2018: 180 [♂]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —Pakistan.

innokentiya Malicky, Ivanov, & Melnitsky, 2011: 1493 [type locality: [Indonesia], Lombok, Senaru WF, 455 m; ZIN; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

minutissima Ris, 1897: 417 [type locality: [Switzerland], Zürichberg, in grosser Menge an einer mit Schachtelhalmen bewachsenen kleinen Quelle im Trichtenhaustobel; depository not designated; ♂]. —Morton 1904: 325 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Kumanski 1979: 17 [♂; distribution]. —Malicky 1983b: 57 [atlas; ♂; ♀]. —Kumanski 1985: 116 [♂]. —Cianficconi et al. 1993: 261 [distribution]. —Moretti et al. 1996: 297 [distribution]. —Chvojka 1997: 27–38 [distribution]. —Cianficconi et al. 1999: 57, 59 [distribution; ♂]. —Malicky 1999f: 32 [distribution]. —Valle 2001: 68 [distribution]. —Graf et al. 2004: 31 [larva]. —Malicky 2004a: 66 [atlas]. —Malicky 2005b: 547 [checklist]. —Malicky 2005a: 66 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Kjærandsen and Ito 2009: 178 [checklist]. —Waringer and Graf 2011: 282 [larval synopsis]. —Oláh and Kovács 2018: 180 [♂].

Distribution. —Albania, Austria, Bulgaria, Greece, Italy, Switzerland.

nakama Ito, 2017a: 107 [type locality: Japan, Ryukyu Islands, Iriomote-jima, Nakamagawa river system, Nishi-funatsuki-gawa, Nishi-funatsuki-bashi, 24°18'10"N, 123°51'34"E, 10 m a.s.l.; CMB-ZI; ♂].

Distribution. —Japan.

orienthula Kjærandsen & Ito, 2009: 177 [type locality: Japan, Hokkaido, Oshima, Shiriuchi-cho, hygropetric habitat beside Idesu River, 41°34'N, 140°20'E, 170–200 m a.s.l.; CMB-ZI; ♂]. —Tanida and Kuranishi 2016: 71 [checklist]. —Ito 2017a: 105 [♂; ♀; distribution].

Distribution. —Japan.

pasak Wells, 1993: 352 [type locality: [Indonesia] Bali, Bali Barat, Sg. Bandangung, N of Medewi; NTM; ♂]. —Kjærandsen and Ito 2009: 178 [checklist]. —Malicky 2010a: 37 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

rinjani Malicky, Ivanov, & Melnitsky, 2011: 1493 [type locality: [Indonesia], Lombok, Senaru, irrigation, 8°18'29"S, 116°24'27"E, 508 m; ZIN; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution]. —Oláh and Kovács 2018: 180 [♂].

Distribution. —Indonesia.

roudra Schmid, 1960: 87 [type locality: [Pakistan] Himalaya, Kawai; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*]. —Malicky and Chantaramongko 2007: 1027 [distribution]. —Kjærandsen and Ito 2009: 178 [checklist]. —Mattern 2015: 501 [distribution]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —Nepal, Pakistan.

taji Wells, 1993: 352 [type locality: [Indonesia] Bali, Bali Barat, Sg. Bandangung, N of Medewi; NTM; ♂]. —Kjærandsen and Ito 2009: 178 [checklist]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

tyndareos Malicky & Chantaramongkol, 2007: 1027 [type locality: Thailand, Boripat WF, 6°59'N, 100°09'E, 200 m; Collection Malicky; ♂]. —Kjærandsen and Ito 2009: 178 [checklist]. —Malicky 2010a: 37 [atlas; ♂].

Distribution. —Thailand.

Genus *Missitrichia* Wells, 1991

Missitrichia Wells, 1991: 508 [type species: *Missitrichia nusam* Wells, 1991, original designation].

Missitrichia currently contains three species occurring in Papua New Guinea and Indonesia. There are several similarities between *Missitrichia* and *Hydroptila*, but the two can be distinguished by differences in wing venation, features of the adult head, and features of the male genitalia (Wells 1991). The larvae are unknown.

kunkora Oláh, 2012: 49 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Warmon Creek, 1. waterfall; Collection Oláh; ♂]. —Oláh and Kovács 2018: 179 [distribution].

Distribution. —Indonesia.

nusam Wells, 1991: 510 [type locality: Papua New Guinea, Morobe Province, Mt Missam, 1300 m; BPBM; ♂].

Distribution. —Papua New Guinea.

vagot Oláh, 2013: 67 [type locality: Indonesia, Batanta Island, northern coast, small stream with dry mouth, 1000–1500 m above Dry mouth; Collection Oláh; ♂]. —Oláh 2016: 113 [distribution].

Distribution. —Indonesia.

Genus *Mulgravia* Wells, 1982

Mulgravia Wells, 1982: 262 [type species: *Mulgravia coronata* Wells, 1982, original designation]. —Wells 1997: 1 [checklist].

The genus *Mulgravia* comprises two species known from Australia. Adults of the genus share many similarities with *Hellyethira* but can be distinguished by several features of the male genitalia (Wells 1982). The larval stage is unknown.

carteri Wells, 1983: 647 [type locality: Australia, New South Wales, Clarence R., at Yates Crossing; NMV; ♂; ♀]. —Neboiss 1986: 68 [atlas; ♂; ♀].

Distribution. —Australia.

coronata Wells, 1982: 262 [type locality: Australia, Queensland, Little Mulgrave River; ANIC; ♂]. —Neboiss 1986: 68 [atlas; ♂].

Distribution. —Australia.

Genus *Oxyethira* Eaton, 1873

Oxyethira Eaton, 1873: 143 [type species: *Hydroptila costalis* Curtis, 1834, type species original designation, is a species of *Orthotrichia* according to Neboiss (1963). *Oxyethira costalis* Curtis sensu Eaton, 1873, is probably *Oxyethira flavicornis* (Pictet, 1834)]. —McLachlan 1880: 520 [revision]. —Mosely 1939b: 281 [key to the British species]. —Ross 1944: 133 [species key for adults]. —Marshall 1979b: 203 [generic review]. —Blickle 1979: 36 [key to species of America north of Mexico]. —Wells 1981: 104 [key to males of Australian species]. —Kelley and Morse 1982: 260 [key to females from the southern United States]. —Kelley 1984a: 435 [generic revision; classification of subgenera and species groups]. —Kelley 1985: 230 [revision]. —Wells 1985b: 16 [larva; pupa; case]. —Flint 1991b: 51 [key to Antioquian species]. —Wells 1991: 491 [key to males of New Guinea]. —Botosaneanu 1992: 90 [key to species in the Levant]. —Moulton and Stewart 1996: 124 [key to the Interior Highlands of North America]. —Wells 1997: 1–28 [checklist; larvae of Australian species]. —Kachalova in Medvedev 1998: 188 [key to the species of the European part of the USSR]. —Oláh and Johanson 2011: 129 [subgeneric features]. —Wells and Johanson 2015: 87 [key to New Caledonian species].

- Lagenopsyche* Müller, 1879b: 39 [type species: *Lagenopsyche spirogyrae* Müller, 1879b, subsequent designation by Fischer 1961: 112]. —Müller 1887: 338 [withdrawn in favor of *Oxyethira*]. —Kelley 1984a: 436 [to synonymy].
- Argyrobothrus* Barnard, 1934: 392 [type species: *Argyrobothrus velocipes* Barnard, 1934, monotypic]. —Ross 1948: 202 [to synonymy]. —Kelley 1984a: 438 [as subgenus].
- Loxotrichia* Mosely, 1937b: 165 [type species: *Loxotrichia azteca* Mosely, 1937b, original designation]. —Ross 1944: 133 [to synonymy]. —Kelley 1984a: 442 [as subgenus].
- Dampftrichia* Mosely, 1937b: 169 [type species: *Dampftrichia ulmeri* Mosely, 1937b, monotypic]. —Ross 1944: 133 [to synonymy]. —Kelley 1984a: 438 [as subgenus].
- Oxytrichia* Mosely, 1939b: 289 [type species: *Oxyethira mirabilis* Morton, 1904, original designation]. —Kimmins 1966: 114 [type species returned to *Oxyethira*, thus synonymizing genus]. —Kelley 1984a: 438 [as subgenus]. —Kachalova in Medvedev 1998: 191 [key to the species of the European part of the USSR, as genus].
- Stenoxyethira* Kimmins, 1951: 194, 207 [type species: *Stenoxyethira minima* Kimmins, 1951, original designation]. —Marshall 1979b: 207 [generic review]. —Wells 1981: 114 [generic revision]. —Kelley 1984a: 438 [to synonymy with *Oxyethira*].
- Gnathotrichia* Ulmer, 1951 [type species: *Gnathotrichia isabellina* Ulmer, 1951, original designation]. —Marshall 1979b: 207 [to synonymy with *Stenoxyethira*]. —Wells 1981: 112 [generic revision, as *Gnathotrichia*].
- Dactylotrichia* Kelley, 1984a: 459 [type species: *Oxyethira santiagensis* Flint, 1982a, original designation, as subgenus].
- Trichoglène* Neboiss, 1977: 43 [type species: *Trichoglène columba* Neboiss, 1977, original designation]. —Wells 1981: 106 [considered a synonym of *Oxyethira*]. —Kelley 1984a: 436 [as subgenus].
- Holarctotrichia* Kelley, 1984a: 456 [type species: *Oxyethira distinctella* McLachlan, 1880, original designation, as subgenus]. —Kelley 1986: 777 [revision].
- Mesotrichia* Kelley, 1984a: 458 [type species: *Oxyethira jamaicensis* Flint, 1968b, original designation, as subgenus]. —Özdikmen 2007: 444 [preoccupied in Apidae by Westwood, 1838: 112, replaced with *Kelleyella*].
- Tanytrichia* Kelley, 1984a: 459 [type species: *Oxyethira longissima* Flint, 1974b, original designation, as subgenus].
- Pacificotrichia* Kelley, 1989: 196 [type species: *Oxyethira oropedion* Kelley, 1989, original designation, as subgenus].
- Kelleyella* Özdikmen, 2007: 444 [type species: *Oxyethira jamaicensis* Flint, 1968b, original designation, replacement name for *Mesotrichia*]. —Kelley 1984a: 458 [treated as subgenus *Mesotrichia*].

Oxyethira is a large genus of 253 species, including a single fossil species. The genus displays a near world-wide distribution, excluded only from the polar regions. The larvae are distinct and known for feeding on green filamentous algae (Marshall 1979b). The genus was divided into eleven species groups (*azteca*, *bidentata*,

distinctella, *falcata*, *flavicornis*, *mirabilis*, *pallida*, *rivicola*, *simplex*, *ulmeri*, and *zero-nia*) based on features of the male genitalia (Marshall 1979b). The genus was later divided into eleven subgenera, as listed above, which do not correspond to Marshall's species groups (Kelley 1984a, 1985, 1986, 1989). The larvae of *Oxyethira* were first described, under the name *Lagenopsyche spirogyrae*, by Müller (1879b), with many other species having been described since (Hudson 1886; Morton 1887; Barnard 1934; Ross 1944; Nielsen 1948; Macdonald 1950; Mosely and Kimmins 1953; Ulmer 1957; Jacquemart and Coineau 1962; Flint 1964; Lepneva 1964; Hickin 1967; Jacquemart 1973; Back 1983; Ito and Kawamura 1984; Wells 1985b; Keiper and Walton 1999).

abacatia (*Oxytrichia*) Denning, 1947a: 12 [type locality: [United States], Georgia, Macon; ESUW; ♂]. —Blickle 1979: 53, 93 [checklist; ♂]. —Blickle 1980: 102 [♂]. —Kelley and Morse 1982: 257, 265 [checklist; ♀]. —Kelley 1984a: 440 [checklist]. —Harris et al. 1991: 242 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Moulton and Harris 1999: 546 [♂; distribution]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 10 [checklist]. —Flint 2014: 90 [distribution]. —Denson et al. 2016: 6 [distribution].

Distribution. —U.S.A.

abbreviata (*Trichoglène*) Wells & Johanson, 2015: 46 [type locality: New Caledonia, Province Sud, Monts des Koghis, ca 800 m S Koghi Restaurant, 22.18447°S 166.50315°E, 400 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

absona (unplaced) Flint, 1991b: 51 [type locality: Colombia, Dpto. Antioquia, Quebrada La Cebolla, El Retiro; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

acegua (*Dactylotrichia*) Angrisano, 1995a: 510 [type locality: Uruguay, Cerro Largo, Sa. da Acegua; FHCU; ♂]. —Angrisano 1999: 34 [checklist].

Distribution. —Uruguay.

aculea (*Dampftrichia*) Ross, 1941a: 53 [type locality: United States, Oklahoma, Honey Creek, Turner Falls State Park; INHS; ♂]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Blickle 1979: 53, 91 [checklist; ♂]. —Kelley and Morse 1982: 257, 266 [checklist; ♀]. —Kelley 1984a: 439 [checklist]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton et al. 1994: 170 [distribution]. —Moulton and Stewart 1996: 125 [♂; distribution]. —Harris et al. 1996: 240 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Baumgardner and Bowles 2005: 11 [distribution; biology]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Mendez et al. 2019: 128 [checklist].

Distribution. —Mexico, U.S.A.

acuta (unplaced) Kobayashi, 1977: 6 [type locality: [Japan], Utonai Pond, Utonai, Tomakami-shi, Hokkaido; depository not designated; ♂; ♀]. —Ito and Kawamura 1984: 313 [larva; pupa; case; biology]. —Kelley 1984a: 442 [to *Hellyethira*]. —Ito et al. 1993: 142 [checklist; as *Oxyethira*]. —Tanida et al. 2005: 442 [larva; as *Oxyethira*]. —Oláh and Ito 2013: 32 [♂; distribution]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 3 [♂; ♀; distribution].

Distribution. —Japan.

aeola (*Oxytrichia*) Ross, 1938a: 117 [type locality: [Canada], British Columbia, Vancouver, along Seymour Creek; INHS; ♂]. —Roy and Harper 1979: 151 [distribution]. —Blickle 1979: 53, 93 [checklist; ♂]. —Blickle 1980: 102 [♂]. —Kelley 1984a: 440 [checklist]. —Harper 1989: 541 [distribution]. —Harper 1990: 49 [distribution; biology]. —Masteller and Flint 1992: 70 [distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Moulton and Harris 1999: 547 [♂; distribution]. —Houghton et al. 2001: 505 [distribution]. —Houghton et al. 2011b: 6 [phenology; habitat; distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

ahipara (*Trichoglène*) Wise, 1998: 21 [type locality: [New Zealand], Ahipara Plateau, Upper Hunahuna Stm. Vy.; AMNZ; ♂]. —Ward and Henderson 2004: 10 [checklist].

Distribution. —New Zealand.

akibeel (*Dampftrichia*) Malicky, 2012: 1266 [type locality: Indonesian, Kalimantan, PT Silva Rimba Lestari (area), Camp Limbang, 60 m, 0.07'N, 116°18'E; NMPC; ♂].

Distribution. —Indonesia.

alaluz (*Dampftrichia*) Botosaneanu, 1980: 112 [type locality: Cuba, Jardin Botanique de Soledad, Cienfuegos, Prov. Las Villas; ZMUA; ♂]. —Botosaneanu 1979: 50 [distribution]. —Kelley 1984a: 439 [checklist]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

albaequae (*Mesotrachia*) Botosaneanu, 1995a: 30 [type locality: Dominican Republic, Salto Aqua Blanca, Rio Grande, 3 km from Convento; ZMUA; ♂; ♀]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Flint and Sykora 2004: 41 [distribution; to *Mesotrachia*]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic.

albiceps (*Trichoglène*) (McLachlan, 1862): 304 [type locality: New Zealand; depository not designated; ♂; in *Hydroptila*]. —Eaton 1873: 130, 145 [revision; to *Oxyethira*]. —Mosely 1924: 673 [♂; distribution]. —Mosely and Kimmins 1953: 512 [♂]. —Wise 1964: 253 [distribution]. —Leader 1972: 196 [♂; ♀; pupal case]. —Wise 1972: 260 [larval-pupal cases; distribution]. —Cowley 1978: 672 [distribution; larva]. —Wise 1978: 113 [distribution]. —Townes 1981: 204 [distribution; life history]. —Kelley 1984a: 436 [checklist]. —Neboiss 1986: 84 [atlas; ♂; ♀]. —Bayly 1990: 52 [distribution; biology]. —Quinn et al. 1992: 265, 267 [distribution; biology]. —Winterbourn 1998: 68 [distribution; biology].

—Collier and Smith 1998: 57 [distribution; biology]. —Joy and Death 2000: 118 [distribution]. —Winterbourn and Crowe 2001: 1485 [biology]. —Ward and Henderson 2004: 10 [checklist]. —Quinn et al. 2004: 143 [distribution]. —James and Suren 2009: 2232 [biology]. —Oláh and Johanson 2010a: 27 [distribution]. —Larned and Kilroy 2014: 353 [biology]. —Wells and Kjer 2016: 51 [distribution].

Distribution. —New Zealand, Norfolk Island.

allagashensis (*Oxyethira*) Blickle, 1963: 20 [type locality: [United States], Maine, Allagash; INHS; ♂]. —Blickle 1979: 53, 95 [checklist; ♂]. —Roy and Harper 1979: 151 [checklist]. —Kelley 1984a: 437 [checklist]. —Harper 1989: 541 [distribution]. —Harper 1990: 49 [distribution; biology].

Distribution. —Canada, U.S.A.

amieu (*Trichoglène*) Wells & Johanson, 2015: 52 [type locality: New Caledonia, Chute, ~15 km N Col d'Amieu on La Foa-Canala Rd; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

anabola (*Oxytrichia*) Blickle, 1966: 185 [type locality: [United States], New Hampshire, Durham; INHS; ♂]. —Roy and Harper 1975: 1082 [distribution]. —Blickle 1979: 53, 93 [checklist; ♂]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1980: 102 [♂]. —Roy and Harper 1981: 105 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Kelley 1984a: 440 [checklist]. —Harper 1989: 541 [distribution]. —Harris et al. 1991: 243 [distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Moulton and Harris 1999: 547 [♂; distribution]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Flint et al. 1994: 4 [distribution]. —Myers et al. 2011: 108 [distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

andina (*Oxytrichia*) Kelley, 1983: 52 [type locality: Argentina, Rio Negro Prov., Rio Guillermo, Villa Mascardi; NMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Angrisano 1999: 34 [checklist].

Distribution. —Argentina, Chile.

angustella (unplaced) Martynov, 1933: 139 [type locality: [Japan], Matsumoto, Prov. of Shinano, a limnocrène; depository not designated; ♀]. —Kelley 1984a: 442 [checklist]. —Ito et al. 1993: 142 [checklist]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 6 [♂; ♀; distribution]. —Nozaki et al. 2019: 168, 173 [distribution; seasonality].

—*kakida* Oláh & Ito, 2013: 30 [type locality: Japan, Honshu, Shizuoka, Shimizu-cho, kakida-gawa, N35°06'11" E138°54'10", 13 m; CMB-ZI; ♂]. —Nozaki and Tanida 2007: 256 [misidentified as *O. josifovi*, according to Oláh and Ito 2013: 30]. —Malicky and Chantaramongkol 2007: 1030 [misidentified as *O. datra*, according to Oláh and Ito 2013: 30]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 6 [to synonymy].

Distribution. —Japan.

apinolada (*Oxytrichia*) Holzenthal & Harris, 1992: 157 [type locality: Costa Rica, Guanacaste, Parque Nacional Rincón de la Vieja, Quebrada Agua Apinolada, 10.759°N, 85.292°W; NMNH; ♂]. —Ríos-Touma et al. 2017: 10 [distribution]. —Harris and Armitage 2019: 5, 21 [distribution].

Distribution. —Costa Rica, Ecuador, Panama.

arantala (unplaced) Oláh & Johanson, 2011: 130 [type locality: Peru, San Martin Prov., creek crossing rd. Juan Guerra-Chazuta, 14 km (rd.) E Colombia Bridge, 6°35.594'S 76°13.172'W; NHRS; ♂].

Distribution. —Peru.

araya (*Holarctotrichia*) Ross, 1941b: 15 [type locality: [Canada], Hampton, New Brunswick; INHS; ♂]. —Etnier 1965: 147 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 54, 91 [checklist; ♂]. —Kelley 1984a: 438 [checklist]. —Harper 1989: 541 [distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Wiggins and Parker 1997: 794 [distribution]. —Houghton et al. 2001: 505 [distribution; as *arraya*]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

archaica (*Holarctotrichia*) Malicky, 1975: 83 [type locality: Portugal, Rio Beça, Vidoeiro; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 59 [atlas; ♂]. —Kelley 1984a: 438 [checklist]. —González et al. 1986: 113 [distribution]. —Malicky 2004a: 71 [atlas]. —Malicky 2005b: 547 [checklist; taxonomic note]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Portugal, Spain.

arctodactyla (*Dactylotrichia*) Kelley, 1983: 42 [type locality: Venezuela, Merida State, Mucujun Valley, 19 km NE Merida; NMNH; ♂]. —Kelley 1984a: 442 [checklist].

Distribution. —Venezuela.

argentiniensis (unplaced) Flint, 1982a: 45 [type locality: Argentina, Pcia. Buenos Aires, Arroyo Pescado, Rt. 11, 15 km E La Plata; NMNH; ♂]. —Flint 1982b: 42 [distribution]. —Kelley 1984a: 442 [checklist]. —Angrisano 1995a: 510 [distribution]. —Angrisano 1995b: 34 [larva]. —Mangeaud 1996: 154 [distribution]. —Angrisano 1999: 34 [checklist]. —Angrisano and Sganga 2007: 36 [♂; distribution; as *O. argentinensis*].

Distribution. —Argentina, Uruguay.

arizona (*Dampftrichia*) Ross, 1948: 202 [type locality: United States, Arizona, Pinal County, Superior, in Boyce Thompson Arboretum; INHS; ♂]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Blickle 1979: 54, 91 [checklist; ♂]. —Kelly and Morse 1982: 257, 263 [checklist; ♀]. —Kelley 1984a: 439 [checklist]. —Holzenthal 1988: 62 [distribution; as *arizonica*]. —Botosaneanu 1989: 101 [distribution]. —Holzenthal and Harris 1992: 172 [distribution]. —Flint and Sykora 1993: 49 [checklist as *arizonensis*]. —Keiper and Walton 1999: 214 [larva; biology]. —Maes 1999: 1194 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Botosaneanu and Thomas 2005: 44 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Blinn and Ruiter 2009a: 305

[biology]. —Chamorro-Lacayo et al. 2007: 43 [distribution]. —Harris et al. 2012: 10 [♂; distribution]. —Armitage et al. 2015b: 5 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Mendez et al. 2019: 119 [checklist].

Distribution. —Costa Rica, Cuba, Dominica, Jamaica, Martinique, Mexico, Nicaragua, Panama, Puerto Rico, U.S.A.

arok (*Trichoglène*) Oláh & Johanson, 2010a: 27 [type locality: New Caledonia, Province Sud, Monts Ksa Ne Mwa, on road between Nouméa and Yaté, 2.0 km E Pic Mouirange, 22°12.356'S 166°40.798'E, 220 m; MNHN; ♂]. —Wells and Johanson 2015: 51 [♂; distribution]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

artuvillosa (*Dampfitrachia*) (Wells, 1981): 114 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek at Crusher; WAM; ♂; ♀; in *Stenoxethira*, as *artuvillosus*]. —Kelley 1984a: 438 [checklist]. —Neboiss 1986: 82[atlas; ♂; ♀].

Distribution. —Australia.

azteca (*Loxotrichia*) (Mosely, 1937b): 165 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂; in *Loxotrichia*]. —Flint 1968a: 55 [♂; ♀; distribution]. —Flint 1974b: 66 [♂; distribution]. —Bueno-Soria and Flint 1978: 205 [distribution]. —Blickle 1979: 93 [♂]. —White and Fox 1979: 76 [phoretic association observed]. —Flint 1981: 30 [♂; distribution]. —Kelley and Morse 1982: 257, 264 [checklist; ♀]. —Lewis and Fairchild 1983:135 [biology]. —Kelley 1984a: 442 [checklist]. —Holzenthal 1988: 62 [distribution]. —Flint and Reyes 1991: 488 [♂; ♀; distribution]. —Holzenthal and Harris 1992: 172 [distribution]. —Aguila 1992: 539 [distribution]. —Botosaneanu and Sakal 1992: 202 [distribution]. —Botosaneanu and Alkins-Koo 1993: 27 [distribution]. —Flint and Sykora 1993: 57 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Flint 1996b: 99 [distribution]. —Flint 1996c: 401 [distribution]. —Moulton and Stewart 1996: 125 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Muñoz-Quesada 2000: 278 [checklist]. —Botosaneanu 2002b: 88 [distribution; biology]. —Zeullig et al. 2006: 43 [distribution]. —Bowles et al. 2007: 22 [distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [distribution]. —Oláh and Johanson 2011: 131 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Ríos-Touma et al. 2017: 10 [checklist]. —Razo-González 2018: 32 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Barba-Álvarez et al. 2019: 86 [distribution].

Distribution. —Belize, Colombia, Costa Rica, Ecuador, French Guiana, Grenada, Guatemala, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad, Venezuela, U.S.A.

bamaga (*Trichoglène*) Wells & Dostine, 2016: 594 [type locality: [Australia] North East Queensland, Bamaga; ANIC; ♂].

Distribution. —Australia.

baotianensis (*Oxyethira*) Xue, Luo, & Guo, 1992: 353 [type locality: [China] Baotianman, Henan; HAUZ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

baritu (*Dactylotrichia*) Angrisano, 1995b: 30 [type locality: Argentina, Salta, Parque Nacional Baritú; MACN; ♂]. —Angrisano 1999: 34 [checklist].

Distribution. —Argentina.

bettyae (*Tanytrichia*) Thomson & Holzenthal, 2012: 29 [type locality: Venezuela, Guárico, UCV San Nicolasito Field Station, 08°8.296'N, 66°24.459'W, 62 m; UMSP; ♂]. —de Souza et al. 2013: 586 [distribution]. —Paprocki and França 2014: 51 [checklist]. —Rocha et al. 2018: 153 [checklist]. —Moreno et al. 2020: 266 [distribution].

Distribution. —Brazil, Venezuela.

bicornuta (*Tanytrichia*) Kelley, 1983: 45 [type locality: Brazil, Amazonas State, Igarape do Mendu, nr. Manaus; NMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Angrisano 1999: 34 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 51 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

bidentata (*Oxytrichia*) Mosely, 1934a: 155 [type locality: Argentina, Terr. Rio Negro; NHMUK; ♂]. —Mosely 1939b: 289 [to *Oxytrichia*]. —Flint 1974a: 88 [checklist; to *Oxyethira*]. —Kelley 1984a: 440 [checklist]. —Angrisano 1999: 34 [checklist]. —Muzón et al. 2005: 57 [distribution]. —Miserendino and Brand 2007: 312 [biology]. —Brand and Miserendino 2011a: 35 [biology]. —Oláh and Johanson 2011: 132 [distribution]. —Brand et al. 2012: 90 [biology]. —Brand and Miserendino 2014: 77 [community ecology].

Distribution. —Argentina, Chile.

bifurcata (*Oxyethira*) Yang & Kelley in Yang et al. 1997: 99 [type locality: [China], Sichuan Province, Jiangjinxian, Simianshan, Feilonghe, 800 m; NAUJ; ♂]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

bogambara (*Oxyethira*) Schmid, 1958b: 67 [type locality: [Sri Lanka] Ceylan, Kandapola (C. P., 6300 ft) 1-III, Bamuraella Oya, en amont de la précédente station, ruisseau clair et profond, formant des méandres accentués, dans un pâturage humide à Aracées blanches; depository not designated; ♂]. —Kelley 1984a: 437 [checklist]. —Oláh 1989: 287 [distribution]. —Wells and Dudgeon 1990: 170 [distribution]. Wells 1990c: 117 [distribution]. —Xue and Yang 1991: 19 [distribution]. —Wells 1991: 493 [distribution]. —Wells and Huisman 1992: 107 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Wells and Malicky 1997: 186 [distribution]. —Wells and Mey 2002: 130 [distribution]. —Yang et al. 2005: 458 [checklist]. Mey 2006b: 203 [distribution]. —Malicky and Chantaramongkol 2007: 1029 [distribution]. —Malicky 2007a: 177 [checklist]. —Melnitsky and Malicky 2008: 25 [distribution]. —Malicky 2009b: 10 [distribution]. —Oláh and Johanson 2010a: 29 [distribution]. —Malicky 2010a: 41 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Mattern 2015: 501 [distribution]. —Yang et al. 2016: 476 [checklist]. —Melnitsky et al. 2019: 539 [distribution]. —Malicky et al. 2019: 429 [distribution]. —Laudee and Mesuk 2019: 110 [distribution].

—*hainanensis* Yang & Xue, 1992: 230 [type locality: Bawangling, Hainan; NAUJ; ♂].
 —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1030 [to synonymy].

—*paramartha* Schmid, 1960: 98 [type locality: [Pakistan], Bélouchistan, Central Zarghun; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*].
 —Kelley 1984a: 437 [checklist]. —Malicky and Chantaramongkol 2007: 1030 [to synonymy]. —Lonsdale 2020: 38 [holotype depository].

Distribution. —Australia, Bali, Borneo, China, Hong Kong, Indonesia, Malaysia, Nepal, New Guinea, Philippines, Sri Lanka, Thailand, Vietnam.

brasiliensis (unplaced) Kelley, 1983: 49 [type locality: Brazil, Para State, Rio Cururu, area of Missao Cururu; NMNH; ♂]. —Kelley 1984a: 442 [checklist]. —Angrisano 1999: 35 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 51 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

brevis (*Trichoglène*) Wells, 1981: 110 [type locality: [Australia] Western Australia, Cape Leeuwin National Park Spring; NMV; ♂; ♀]. —Kelley 1984a: 436 [checklist].
 —Neboiss 1986: 84 [atlas; ♂; ♀].

Distribution. —Australia.

buenoi (unplaced) Harris & Armitage, 2019: 16 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

burkina (unplaced) Gibon, Guenda, & Coulibaly, 1994: 110 [type locality: Burkina Faso, sur la haute Mouhoun à Orodara; MNHN; ♂].

Distribution. —Burkina Faso.

caledoniensis (*Trichoglène*) Kelley, 1989: 196 [type locality: New Caledonia, Plum, 20–60 m; BPBM; ♂]. —Wells 1995: 233 [distribution]. —Wells and Johanson 2015: 49 [♂; distribution]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

calori (*Dampfitrachia*) de Souza & Santos, 2017: 485 [type locality: Brazil, Bahia, Barreiras, Cachoeira Acaba Vidas, 12°8'00"S, 44°59'00"W [approximate coordinates]; DZRJ; ♂]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Brazil.

campanula (*Oxyethira*) Botosaneanu, 1970: 291 [type locality: [North Korea], Station 17, Mts. Mjohjang-san, district Hjangsan, Hjangam-ri; MZPW; ♂]. —Kelley 1984a: 437 [checklist]. —Wells and Dudgeon 1990: 171 [distribution]. —Xue and Yang 1991: 19 [distribution]. —Wells and Huisman 1992: 107 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Wells and Huisman 2001: 210 [distribution]. —Wells and Mey 2002: 130 [distribution]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1030 [distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 29 [distribution]. —Malicky 2010a: 41

- [atlas; ♂]. —Malicky 2014a: 1623 [checklist]. —Mattern 2015: 502 [distribution]. —Yang et al. 2016: 476 [checklist]. —Park and Kong 2020: 297 [checklist].
- aspera* Yang & Kelley in Yang et al. 1997: 97 [type locality: [China], Fujian Province, Wuyishan, Taoyuandong, 100 m from Jiouqu, 235 m; NAUJ; ♂]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1030 [to synonymy]. —Yang et al. 2016: 476 [checklist].
- lobophora* Mey, 1998a: 553 [type locality: [Philippines, Mindanao] northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Malicky and Chantaramongkol 2007: 1030 [to synonymy].
- paieon* Malicky, 2004b: 296 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), unweit des Wehrs des Babai Flusses, über das die Brücke der Ost-West-Hauptstraße Nepals (Mahindra Highway), 28°25'N, 81°23'E, 190 m, Budhi Khola; Collection Malicky; ♂]. —Malicky 2006: 253 [checklist]. —Malicky and Chantaramongkol 2007: 1030 [to synonymy].
- Distribution.** —China, Indonesia, Korea, Malaysia, Nepal, Philippines, Taiwan, Thailand.
- campesina* (*Dampftrichia*) Botosaneanu, 1977: 275 [type locality: Cuba, Oriente, Baire, Rio Mogote; NMNH; ♂]. —Kelley 1984a: 439 [checklist]. —Kumanski 1987: 26 [distribution]. —Botosaneanu 1979: 51 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].
- Distribution.** —Cuba.
- carajas* (*Loxotrichia*) Neto, Ribeiro, & Passos, 2019: 388 [type locality: Brazil, Pará, Parauapebas municipality, Serra dos Carajás, low order stream, 6°2'24.828"S, 50°17'38.184"W; MPEG; ♂].
- Distribution.** —Brazil.
- cascadanta* (*Loxotrichia*) Rocha, Dumas, & de Souza, 2018: 148 [type locality: Brazil, Minas Gerais, São Roque de Minas, Parque Nacional da Serra da Canastra, parte baixa da Cachoeira Casca D'anta, Rio São Francisco, 20°18.54'S, 46°31.37'W, ca 900 m elev; DZRJ; ♂].
- Distribution.** —Brazil.
- chitosea* (*Oxyethira*) Oláh & Ito, 2013: 38 [type locality: Japan, Hokkaido, Ishikari, Chitose-shi, Bibi, Lake Chitose-ko, N42°46'24" E141°43'29", 15 m; CMB-ZI; ♂]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 3 [♂; ♀; distribution].
- Distribution.** —Japan.
- chrysocara* (*Holarctotrichia*) Harris, 2002: 47 [type locality: [United States], Florida, Clay County, Gold head Branch near old mill crossing, 29°49'56"N, 81°56'45"W; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 10 [checklist].
- Distribution.** —U.S.A.

circaverna (*Dactylotrichia*) Kelley, 1983: 50 [type locality: Panama, Canal Zone, Madden Dam; NMNH; ♂]. —Kelley 1984a: 439 [checklist]. —Flint 1992: 174 [distribution]. —Aguila 1992: 539 [distribution]. —Angrisano 1995a: 510 [distribution]. —Angrisano 1995b: 30 [larva; case; distribution]. —Angrisano 1999: 34 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Angrisano and Sganga 2007: 34 [♂; distribution]. —Santos et al. 2009: 42 [checklist]. —Manzo et al. 2014: 166 [distribution]. —Paprocki and França 2014: 51 [checklist]. —Armitage et al. 2015a: 7 [checklist]. —de Souza and Santos 2017: 504 [distribution]. —Ríos-Touma et al. 2017: 10 [checklist]. —Rocha et al. 2018: 152 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Moreno et al. 2020: 265 [distribution].

Distribution. —Argentina, Brazil, Curacao, Ecuador, Panama, Uruguay.

cirrifer (*Dampftrichia*) Flint, 1964: 57 [type locality: Puerto Rico, Maricao, at fish hatchery; NMNH; ♂; ♀]. —Flint 1968b: 42 [♂; ♀; distribution]. —Flint 1968a: 55 [♂; ♀; distribution]. —Botosaneanu 1979: 50 [distribution]. —Kelley and Morse 1982: 258 [synonymized with *O. arizona*]. —Kelley 1984a: 439 [checklist]. —Kumanski 1987: 26 [♀; distribution]. —Botosaneanu 1991: 130 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu and Hyslop 1998: 16 [resurrected]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Flint and Sykora 2004: 43 [distribution]. —Naranjo López and González Lazo 2005: 149 [distribution; as synonym of *O. arizona*]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Cuba, Dominica, Dominican Republic, Haiti, Puerto Rico.

coercens (*Oxyethira*) Morton, 1905: 70 [type locality: [United States], Ithaca, New York; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 161 [♂; distribution]. —Ross 1944: 137 [♂; distribution]. —Etnier 1965: 147 [distribution]. —Edwards 1973: 506 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1979: 54, 93 [checklist;]. —Parker and Voshell 1981: 4 [checklist]. —Kelley and Morse 1982: 257 [checklist]. —Waltz and McCafferty 1983a: 11 [distribution]. —Harris et al. 1984: 109 [distribution]. —Kelley 1984a: 437 [checklist]. —Bowles and Mathis 1989: 240 [distribution]. —Harris et al. 1991: 244 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Moulton and Stewart 1996: 126 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Etnier 2010: 486 [distribution]. —Ruiter et al. 2013: 3 [distribution; DNA barcoding; larval-adult association]. —Houghton 2016: 46 [biology; as *coercens*]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, U.S.A.

colombiensis (*Tanytrichia*) Kelley, 1983: 44 [type locality: Colombia, Valle Dept., Rio Raposo; NMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Muñoz-Quesada 2000: 278 [checklist]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Colombia, Ecuador.

columba (*Trichoglène*) (Neboiss, 1977): 43 [type locality: [Australia] Tasmania, Dove River, Cradle Mtn Nat. Park; NMV; ♂; ♀; in *Trichoglène*]. —Wells 1981: 106 [♂; ♀; distribution; to *Oxyethira*]. —Kelley 1984a: 436 [checklist]. —Wells 1985b: 17 [larva, case]. —Neboiss 1986: 83 [atlas; ♂; ♀]. —Neboiss 2002: 54 [checklist]. —Oláh and Johanson 2010a: 30 [distribution].

—*elora* Oláh & Johanson, 2010a: 33 [type locality: Australia, Tasmania, Swansea, Meredith River, under bridge on A3, 42°06.945'S 148°03.507'E, 15 m; ANIC; ♂]. —Wells 2012: 67 [to synonymy].

Distribution. —Australia.

complicata (unplaced) Wells, 1990c: 117 [type locality: [Australia] NE Queensland, Yuccabine Creek; NMV; ♂].

Distribution. —Australia.

copina (*Loxotrichia*) Angrisano, 1995b: 32 [type locality: Argentina, Cordoba, Copina; MACN; ♂; larva; case]. —Angrisano 1999: 34 [checklist].

Distribution. —Argentina.

cornutata (*Trichoglène*) Wells, 1990c: 119 [type locality: [Australia] Northern Territory, Kakadu National Park, Radon Springs, 12°45'S 132°55'E; NTM; ♂].

Distribution. —Australia.

costaricensis (*Dactylotrichia*) Kelley, 1983: 44 [type locality: Costa Rica, Heredia Prov., Los Cartagos; NMNH; ♂]. —Kelley 1984a: 442 [checklist]. —Holzenthal 1988: 62 [distribution].

Distribution. —Costa Rica.

cotula (*Oxyethira*) Wells & Dudgeon, 1990: 171 [type locality: Hong Kong, Tai Po Kao Forest stream; NHMUK; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —Hong Kong.

cuernuda (*Tanytrichia*) Holzenthal & Harris, 1992: 157 [type locality: Costa Rica, Alajuela, Río Pizote, 5 km (air) S Brasilia, 10.972°N, 85.345°W; NMNH; ♂].

Distribution. —Costa Rica.

culebra (*Oxytrichia*) Holzenthal & Harris, 1992: 160 [type locality: Costa Rica, Alajuela, Río Pizote, 5 km (air) S Brasilia, 10.972°N, 85.345°W; NMNH; ♂]. —Armitage et al. 2016: 11 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Panama.

dactylonedys (*Dactylotrichia*) Kelley, 1983: 42 [type locality: Paraguay, Amambat Dept., Rio Aquidaban, Cerro Cora; NMNH; ♂]. —Kelley 1984a: 442 [checklist]. —Angrisano 1999: 34 [checklist].

Distribution. —Paraguay.

dalmeria (*Loxotrichia*) (Mosely, 1937b): 166 [type locality: Mexico, Chiapas, Esmeralda; NHMUK; ♂; in *Loxotrichia*]. —Bueno-Soria and Flint 1978: 205 [distribution]. —Kelley 1984a: 442 [checklist].

Distribution. —Mexico.

datra (*Oxyethira*) Oláh, 1989: 287 [type locality: Vietnam, Cucphuong, 400 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Malicky and

Chantaramongkol 2007: 1030 [distribution (reported in error, according to Oláh and Ito 2013: 30)]. —Malicky 2010a: 41 [atlas; ♂]. —Oláh and Ito 2013: 29 [♂]. —Tanida and Kuranishi 2016: 72 [as junior synonym of *O. kakida*].

—*josifovi* Kumanski, 1990: 57 [type locality: Korea, Province Kangvon, stream and small torrents of the plain near Casan vill., 1–3 km from the sea (ca. 25 km E of Vonsan); SOFM; ♂; ♀]. —Morse et al. 2001: 102 [distribution]. —Arefina et al. 2002: 102 [distribution]. —Nozaki and Tanida 2007: 246 [distribution (reported in error, according to Oláh and Ito 2013: 30)]. —Malicky and Chantaramongkol 2007: 1030 [to synonymy]. —Ivanov 2011: 195 [checklist]. —Oláh and Ito 2013: 29 [♂; claim holotype is lost]. —Vshivkova et al. 2016: 79 [distribution]. —Potikha and Vshivkova 2016: 364 [distribution]. —Tanida and Kuranishi 2016: 72 [as junior synonym of *O. kakida*]. —Park and Kong 2020: 297 [checklist].

Distribution. —Japan, Korea, Russia, Vietnam.

delcourti (*Oxyethira*) Jacquemart, 1973: 7 [type locality: [Greece], Rhodes, Pétaloudès; IRSNB; ♂; larva]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 59 [atlas; ♂]. —Kelley 1984a: 437 [checklist]. —Sipahiler and Malicky 1987: 129 [distribution]. —Botosaneanu 1992: 91 [♂; ♀]. —Malicky 2004a: 71, 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 66 [distribution]. —Sipahiler 2007: 38 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution]. —Dia 2015: 51 [distribution]. —Karaouzas and Malicky 2016: 18 [distribution].

Distribution. —Greece, Lebanon, Turkey.

desadorna (*Oxytrichia*) Moulton & Harris, 1997: 499 [type locality: Mexico, Nuevo Leon, Municipio de Santiago, spring along road above Cola de Caballo; NMNH; ♂]. —Bueno-Soria et al. 2007: 33 [distribution].

Distribution. —Mexico.

digitata (*Pacificotrichia*) Wells & Johanson, 2015: 73 [type locality: New Caledonia, Province Sud side stream to Rivière Blanche, 10.75 km SW Pont Pérignon, 22°10.073'S a66°39.903'E, 180 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

diplospissa (unplaced) de Souza & Santos, 2017: 490 [type locality: Brazil, Alagoas, Quebrangulo, Reserva Biológica de Pedra Talhada, Rio Cafuringa abaixo da represa, 9°15'15"S, 36°25'07"W; DZRJ; ♂]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

discaelata (*Dampftrichia*) Kelley, 1983: 48 [type locality: Venezuela, Bolivar State, Morichal Tauca, 22 km E Rio Caura; NMNH; ♂]. —Kelley 1984a: 439 [checklist]. —Angrisano 1999: 34 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 51 [checklist]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Brazil, Venezuela.

distinctella (*Holarctotrichia*) McLachlan, 1880: 521 [type locality: Finland; NHMUK; ♂]. —Morton 1893: 80 [♂]. —Morton 1904: 328 [distribution]. —Martynov 1934: 149 [♂]. —Mosely 1939b: 286 [♂]. —Kimmins 1958b: 12 [♀]. —Nybom 1960: 19 [checklist]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and

Malicky 1978: 340 [checklist]. —Malicky 1983b: 59, 60 [atlas; ♂; ♀]. —Kelley 1984a: 438 [checklist]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Tysse 1985: 84 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Spuris 1989: 17 [checklist]. —Andersen et al. 1990: 26 [distribution]. —Andersen et al. 1990: 52 [distribution]. —Mey 1991: 270 [distribution]. —Andersen et al. 1993b: 3 [distribution; ♂; ♀]. —Czachorowski 1995: 279 [distribution]. —Gullefors 2002: 138 [checklist]. —Arefina and Armitage 2003: 17 [distribution]. —Malicky 2004a: 71, 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Gullefors 2008: 64 [checklist]. —Ivanov 2011: 195 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Barndt 2014: 106 [distribution]. —Jacquemin and Coppa. 2015: 107 [distribution]. —Potikha and Vshivkova 2016: 364 [distribution]. —Vshivkova et al. 2016: 78, 80 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 21, 23, 67 [conservation status]. —Gullefors 2018: 108 [biology; distribution].

Distribution. —Denmark, Estonia, Finland, France, Germany, Norway, Poland, Russia, Sweden.

dorsennus (*Pacificotrichia*) Kelley, 1989: 199 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells and Johanson 2015: 61 [♂; distribution]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

driessenii (*Trichoglène*) Wells, 2002b: 39 [type locality: [Australia], Tasmania, Lake St Clair, Site RCE young; ANIC; ♂]. —Neboiss 2002: 54 [checklist].

Distribution. —Australia.

dualis (*Oxytrichia*) —Morton, 1905: 71 [type locality: [United States], Las Vegas, New Mexico; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Sibley 1926: 205 [biology]. —Betten 1934: 162 [checklist]. —Ross 1944: 139 [♀; distribution]. —Unzicker et al. 1970: 172 [distribution]. —Edwards 1973: 506 [distribution]. —Flint and Herrmann 1976: 898 [distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 54, 95 [checklist; ♂]. —Kelley and Morse 1982: 257, 265 [checklist; ♀]. —Waltz and McCafferty 1983a: 11 [distribution]. —Hamilton et al. 1983: 19 [distribution]. —Kelley 1984a: 440 [checklist]. —Bowles and Mathis 1989: 240 [distribution]. —Harris et al. 1991: 245 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1994: 171 [distribution]. —Moulton and Stewart 1996: 126 [♂; distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Harris and Huryn 2000: 80 [♂]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Biondi 2010: 60 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Mendez et al. 2019: 119 [checklist]. —Bowles et al. 2020: 8 [distribution].

—*allosi* Blickle, 1980: 101 [type locality: [United States], California, Butte Co., Oroville, concrete fish ladders at fish hatchery; CAS; ♂; ♀]. —Kelley and Morse 1982: 258 [to synonymy].

Distribution. —U.S.A.

dunbartonensis (*Holarctotrichia*) Kelley, 1981: 368 [type locality: [United States], South Carolina, Aiken Co., Savannah River Plant, Upper Three Runs Creek at SRP 2-1; NMNH; ♂; ♀]. —Kelley and Morse 1982: 257, 263 [checklist; ♀]. —Kelley 1984a: 438 [checklist]. —Floyd et al. 1993: 91 [phenology; distribution]. —Flint 2014: 90 [distribution].

Distribution. —U.S.A.

ecornuta (*Oxyethira*) Morton, 1893: 79 [type locality: Finland, Teisko; MZHF; ♂]. —Morton 1904: 326 [distribution]. —Nybom 1960: 19 [checklist]. —Botosaneanu 1967: 293 [distribution]. —Tobias 1970: 227 [♂; distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 60 [atlas; ♂]. —Kelley 1984a: 437 [checklist]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Botosaneanu and Levanidova 1988: 174 [distribution; ♂]. —Botosaneanu and Levanidova 1988: 174 [♂; distribution]. —Spuris 1989: 17 [checklist]. —Xue and Yang 1991: 20 [distribution]. —Xue et al. 1992: 353–356 [distribution]. —Monson and Holzenthal 1993: 442 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Morse et al. 2001: 102 [distribution]. —Zasykina and Ryabukhin 2001: 45 [checklist]. —Arefina et al. 2002: 102 [distribution]. —Gullefors 2002: 138 [checklist]. —Gullefors 2003: 195 [distribution]. —Houghton and Holzenthal 2003: 38 [distribution]. —Malicky 2004a: 72 [atlas]. —Yang et al. 2005: 458 [checklist]. —Chuluunbat and Morse 2007: 54 [distribution]. —Szczęsny and Godunko 2008: 15 [checklist]. —Gullefors 2008: 63 [checklist]. —Ivanov 2011: 195 [checklist]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Oláh and Ito 2013: 33 [♂; distribution; lectotype designation]. —Yang et al. 2016: 477 [checklist]. —Zasykina 2016: 486 [distribution]. —Chuluunbat et al. 2016: 102 [distribution]. —Vshivkova et al. 2016: 79 [distribution]. —Gullefors 2016: 155 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —China, Finland, Mongolia, Russia, Sweden, Ukraine, U.S.A.

efatensis (*Pacificotrichia*) Kelley, 1989: 201 [type locality: Vanuatu, Efate (NW), Maat, Ambryn Village, 3M.; BPBM; ♂]. —Johanson et al. 2011: 293 [♂; distribution].

Distribution. —Vanuatu.

elerobi (unplaced) Blickle, 1961: 132 [type locality: [United States], Florida, Laurel Hill; INHS; ♂; in *Neotrichia*]. —Blickle 1979: 50, 77 [checklist; ♂]. —Kelley 1981: 370 [♂; ♀; to *Oxyethira*]. —Kelley and Morse 1982: 257, 261 [checklist; ♀]. —Harris et al. 1982b: 81 [distribution]. —Kelley 1984a: 438 [checklist]. —Kelley 1986: 777 [taxonomic placement]. —Harris et al. 1991: 246 [distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 10 [checklist]. —Denson et al. 2016: 6 [distribution].

Distribution. —U.S.A.

enigmatica (*Pacificotrichia*) Wells & Johanson, 2015: 66 [type locality: New Caledonia, Province Sud, W part of Plaine des lacs, 150 m downstream bridge at La Capture,

22°15.967'S 166°49.493'E, 261 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

espinada (*Tanytrichia*) Holzenthal & Harris, 1992: 160 [type locality: Costa Rica, Alajuela, Río Pizote, 5 km N Dos Ríos, 10.948°N, 85.291°W; NMNH; ♂]. —Blahnik et al. 2004: 5 [distribution]. —Paprocki et al. 2004: 12 [checklist]. —Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 51 [checklist]. —de Souza and Santos 2017: 504 [distribution]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil, Costa Rica.

espirita (unplaced) Johanson, Wells, Malm, & Espeland, 2011: 292 [type locality: [Vanuatu] Espiritu Santo, Central Santo, stream in small canyon crossing path to village, 5.5 km NW Nambel, 208 m, loc#21, 15°27.459'S 167°04.022'E; NHRS; ♂].

Distribution. —Vanuatu.

ezoensis (unplaced) Kobayashi, 1977: 5 [type locality: [Japan]. Utonai Pond, Utonai, Tomakomai-shi, Hokkaido; depository not designated; ♂; ♀]. —Kelley 1984a: 442 [checklist].

Distribution. —Japan.

falcata (*Oxyethira*) Morton, 1893: 80 [type locality: type locality not given; depository not designated; ♂]. —Klapálek 1894: 6 [♂; distribution]. —Ris 1894: 131 [distribution]. —Morton 1896: 104 [distribution]. —Morton 1899a: 54 [distribution]. —Morton 1899b: 281 [distribution]. —Morton 1904: 327 [distribution]. —Ulmer 1929: 260 [morphological notes; comparison with *O. frici*]. —Martynov 1934: 154 [♂]. —Mosely 1939b: 285 [♂]. —Schmid 1952: 656 [distribution]. —Kimmins 1958b: 16 [♀; distribution]. —Schmid 1959b: 693 [distribution]. —Schmid 1960: 98 [distribution]. —Nybom 1960: 19 [checklist]. —Jacquemart and Coineau 1962: 16 [distribution; ♂; larva]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Gasith 1971: 98 [distribution]. —Malicky 1974: 122 [checklist]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Kumanski 1979: 6 [♂; distribution]. —Malicky 1980a: 16 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 58, 60 [atlas; ♂; ♀]. —Kelley 1984a: 437 [checklist]. —Kelley 1984b: 186 [♂ ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 144 [♂]. —Wiberg-Larsen 1985: 40 [checklist]. —Moubayed and Botosaneanu 1985: 63 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Sipahiler and Malicky 1987: 107, 122, 129 [distribution]. —Spuris 1989: 17 [checklist]. —Gullefors 1989: 119 [distribution]. —Krušnik 1991: 13 [distribution]. —Botosaneanu 1992: 93 [♂; ♀]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Kahnert 1995: 124 [distribution]. —Maier et al. 1995: 148 [distribution]. —Chvojka 1996: 131 [distribution]. —Weinzierl 1997: 80 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Hohmann 1998: 73 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Nógrádi and Uherkovich 1998: 338

- [distribution]. —Graf et al. 1998: 206 [distribution]. —Hohmann 1999: 35, 36 [checklist; distribution]. —Malicky 1999f: 32 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Cianficconi et al. 1999b: 278 [distribution]. —Uherkovich and Nógrádi 2001: 94 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Valle 2001: 65 [distribution]. —Cianficconi et al. 2002: 146 [distribution]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Ujvárosi 2002: 384 [distribution]. —Mirmoayedi and Malicky 2002: 164 [distribution]. —Gullefors 2002: 138 [checklist]. —Sipahiler 2003b: 33 [distribution]. —Malicky 2004a: 70, 72 [atlas]. —Cianficconi et al. 2004a: 256, 258 [distribution; biology]. —Malicky 2005b: 547 [checklist]. —Sipahiler 2005: 397 [distribution]. —Huang et al. 2005: 469 [distribution]. —Armitage et al. 2005: 27 [checklist]. —Malicky 2005a: 67 [distribution]. —Mey 2005a: 280 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Chvojka 2006: 253 [distribution]. —Wiggers et al. 2006: 54 [distribution]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007b: 569, 575 [distribution]. —Sipahiler 2007: 38 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 113 [checklist]. —Gullefors 2008: 64 [checklist]. —Szczyński and Godunko 2008: 15 [checklist]. —Robinson 2009: 119 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Cianficconi et al. 2011: 47 [distribution]. —Ivanov 2011: 195 [checklist]. —Viidalepp et al. 2011: 195, 196 [distribution]. —Salokannel et al. 2012: 204 [confirmed as distinct species]. —Sipahiler 2012a: 7 [distribution]. —Andersen and Hagenlund 2012: 136 [distribution]. —Corallini et al. 2013b: 26 [distribution]. —Tempelman and Sanabria 2013a: 20 [distribution; larva; ♀]. —Malicky 2014b: 27 [teratological structures]. —Lock 2014: 199 [distribution]. —O'Connor 2015: 28, 98 [distribution]. —Martín et al. 2015: 74 [distribution]. —Karaouzas and Malicky 2015: 14 [distribution]. —Martínez et al. 2016: 52 [distribution]. —Smirnova et al. 2016: 401 [distribution]. —Dia 2015: 51 [distribution]. —Yang et al. 2016: 477 [checklist]. —Gullefors 2016: 155 [checklist]. —Sipahiler 2016: 15 [checklist]. —Martín et al. 2016: 262 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —Melnitsky et al. 2017: 6 [distribution]. —Sipahiler 2017b: 13 [distribution]. —Graf et al. 2017: 48 [distribution]. —Valle and Lodovici 2018: 147 [distribution]. —Komzák and Kroča 2018: 169 [distribution]. —O'Connor and O'Connor 2018: 83 [distribution]. —Sipahiler 2018: 41 [distribution]. —Edmonds-Brown 2020: 91 [checklist]. —Smirnova et al. 2020: 68 [distribution].
- assia* Botosaneanu & Moubayed, 1985 in Moubayed and Botosaneanu 1985: 64 [type locality: [Lebanon], Liban, Labwé, sources karstiques dans le bassin supérieur de l'Oronte, 1000 m; ZMUA; ♂; ♀]. —Botosaneanu 1992: 95 [♂; ♀]. —Malicky 2005b: 547 [to synonymy].
- bidentata* Nybom, 1948: 9 [type locality: [Portugal], Azores; MZHF; ♂]. —Nybom 1954: 1 [replacement name *O. dentata*; preoccupied by *O. bidentata* Mosely, 1934a: 155].
- boreella* Svensson & Tjeder, 1975: 131 [type locality: Sweden, Prov. Västerbotten, Finnmyran, 7 km W of Hällnäs, 64°19'N, 19°29'E; MZLU; ♂; ♀]. —Botosaneanu

- and Malicky 1978: 340 [checklist]. —Malicky 1983b: 58, 60 [atlas; ♂; ♀]. —Kelley 1984a: 437 [checklist]. —Kelley 1984b: 186 [♂, ♀]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Gullefors 2002: 138 [checklist]. —Malicky 2004a: 70, 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Malicky 2007b: 51 [to synonymy]. —Gullefors 2008: 63 [checklist]. —Salokannel et al. 2012: 202 [confirmed as synonym].
- dentata* Nybom, 1954: [type locality: [Portugal, Azores]; MZHF; ♂; replacement name for *O. bidentata* Nybom 1948: 9]. —Nybom 1965: 90 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Kelley 1984b: 186 [to synonymy].
- rhodani* Schmid, 1947: 531 [type locality: [Switzerland], Bois de Finges; NHMUK; ♂]. —Schmid 1960: 99 [to synonymy]. —Kelley 1984a: 437 [checklist].
- Distribution.** —Algeria, Austria, Belgium, Bulgaria, China, Czech Republic, England, Estonia, Denmark, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Israel, Italy, Jordan, Kazakhstan, Lebanon, Morocco, Netherlands, Norway, Pakistan, Portugal, Romania, Russia, Scotland, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, Vietnam.
- fijiensis* (*Pacificotrichia*) Kelley, 1989: 201 [type locality: Fiji, Levu, Nandarivatu; BPBM; ♂].
- Distribution.** —Fiji.
- flagellata* (*Argyrobothrus*) Jacquemart, 1963c: 6 [type locality: [Mauritius], Ile de la Réunion, Hell-Bourg; IRSNB; ♂]. —Marlier and Marlier 1982: 24 [distribution; larva]. —Kelley 1984a: 438 [checklist].
- Distribution.** —Mauritius, Réunion.
- flavicornis* (*Oxyethira*) (Pictet, 1834): 225 [type locality: [Switzerland]; no holotype designated; in *Hydroptila*]. —Hagen 1864b: 234 [comments on larvae and case]. —Tobias 1970: 228 [♂; distribution]. —Solem 1970a: 2 [distribution]. —Andersen 1974: 26 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Andersen 1978: 149 [distribution]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 58, 60 [atlas; ♂; ♀]. —Kelley 1984a: 437 [checklist]. —Kumanski 1985: 144 [♂]. —Nógrádi 1985: 131 [distribution; ♂]. —Andersen and Tysse 1985: 84 [distribution]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Spuris 1989: 17 [checklist]. —Waringer 1989: 390 [distribution; ecology]. —Usseglio-Polatera and Bournaud 1989: 254 [distribution]. —Andersen et al. 1990: 26 [distribution]. —Andersen et al. 1990: 52 [distribution]. —Andersen et al. 1993b: 3 [distribution]. —Andersen et al. 1993a: 51 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Nógrádi and Uherkovich 1998: 338 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Malicky 1999c: 96 [distribution]. —Wiberg-Larsen and Karsholt 1999: 126 [distribution]. —Cianficconi et al. 1999b: 278 [distribution]. —Morse et al. 2001: 102 [distribution]. —Uherkovich and Nógrádi 2001: 94 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Gullefors

- 2002: 138 [checklist]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 70, 72 [atlas]. —Graf and Hutter 2004: 147 [distribution]. —Berlin 2005: 130 [distribution]. —Gullefors 2005a: 118 [distribution]. —Gullefors 2005b: 138 [distribution]. —Mey 2005b: 119 [distribution]. —Hohmann 2005: 106 [checklist]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Gullefors 2006: 136, 137 [distribution]. —Morse et al. 2006: 321 [distribution]. —Waringer and Graf 2006: 356 [distribution]. —Chvojka and Komzák 2006: 358 [distribution]. —Schliess-Bühler and Rezbanyai-Reser 2006: 73 [distribution]. —Berlin and Thiele 2007: 50 [checklist]. —Robert 2007: 82 [checklist]. —Gullefors and Johanson 2007: 64 [distribution]. —Cianficconi et al. 2007b: 575 [distribution]. —Ivanov and Melnitsky 2007: 32 [distribution]. —Szczęsny and Godunko 2008: 15 [checklist]. —Waringer and Graf 2008: 142 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 113 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Višinskienė 2009: 28 [checklist]. —Corallini and Cianficconi 2011: 628 [checklist]. —Ivanov 2011: 195 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Andersen and Hagenlund 2012: 136 [distribution]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Oláh and Ito 2013: 34 [♂]. —O'Connor 2013: 65 [distribution]. —Zuyderduyn and Tempelman 2013: 25 [distribution]. —Tempelman et al. 2013: 288 [distribution]. —Tempelman and Sanabria 2013b: 144 [distribution]. —O'Connor and O'Connor 2014: 273 [distribution]. —Mey 2014: 187 [distribution]. —O'Connor and Bond 2014: 24 [distribution]. —Chalkley 2014: 13 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —O'Connor 2015: 28, 99 [distribution; states that *O. flavicornis* has been misidentified as *Orthotrichia costalis* in earlier Irish literature]. —Smirnova et al. 2016: 401 [distribution]. —Küttner et al. 2016: 179 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Buczyńska et al. 2016: 161 [distribution]. —Gullefors 2016: 155 [checklist]. —Chuluunbat et al. 2016: 102 [distribution]. —Melnitsky and Ivanov 2017: 19 [distribution]. —O'Connor and O'Connor 2018: 83 [distribution]. —O'Connor et al. 2018: 23 [distribution]. —Gullefors 2018: 108 [biology; distribution]. —Lock and van Butsel 2018: 1 [distribution]. —O'Connor 2020: 141 [distribution]. —Hansen and Gíslasen 2020: 132 [checklist].
- costalis* Eaton 1873: 144 *nec* Curtis, 1834: 218 [type locality: [England], ponds in Woburn and Battlesden Parks, Bedfordshire; no holotype designated]. —Morton 1887: 201 [notes on case]. —Morton 1899a: 54 [distribution]. —Klapálek 1890: 204 [larva]. —Klapálek 1893: 138 [larva]. —Ris 1903: 17 [distribution]. —Siltala 1908: 16 [distribution]. —Spandl 1923: 357 [larva]. —Ulmer 1925: 432 [distribution]. —Martynov 1934: 149 [♂]. —Henriksen 1937: 3 [distribution]. —Mosely 1939b: 282 [♂]. Kimmins 1943: 155 [distribution]. —Nielsen 1948: 76 [larva]. —Nybom 1960: 19 [checklist]. —Spuris 1962: 57, 61 [distribution]. —Ulmer 1963: 266 [♂; distribution]. —Neboiss 1963: 594 [name to be replaced]

by *flavicornis*]. —Spuris 1964: 13 [distribution]. —Botosaneanu 1967: 293 [as synonym of *O. flavicornis*].

Distribution. —Austria, Belarus, Czech Republic, Denmark, Egypt, England, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Kazakhstan, Latvia, Luxembourg, Mongolia, Netherlands, Norway, Poland, Slovenia, Romania, Russia, Scotland, Sweden, Switzerland, Ukraine.

florida (*Dampftrichia*) Denning, 1947a: 12 [type locality: [United States], Florida, Miami; ESUW; ♂; ♀]. —Botosaneanu 1979: 40, 51 [♂; ♀; distribution]. —Blickle 1979: 54, 93 [checklist; ♂]. —Kelley and Morse 1982: 257, 266 [checklist; ♀]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Kelley and Morse 1982: 266 [♀]. —Pescador et al. 2004: 134 [checklist]. —Naranjo López and González Laz 2005: 149 [checklist]. —Harris et al. 2012: 10 [checklist].

Distribution. —Cuba, U.S.A.

forcipata (*Holarcotrichia*) Mosely, 1934a: 153 [type locality: U.S.A., Michigan; NHMUK; ♂]. —Morse and Blickle 1953: 72 [checklist]. —Etnier 1968: 191 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Roy and Harper 1979: 152 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 54, 95 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Swegman et al. 1981: 139 [distribution]. —Roy and Harper 1981: 105 [distribution]. —Kelley and Morse 1982: 257, 267 [checklist; ♀]. —Huryn and Foote 1983: 791 [distribution]. —Harris et al. 1984: 109 [distribution]. —Kelley 1984a: 438 [checklist]. —Bowles and Mathis 1989: 240 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Harris et al. 1991: 247 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Masteller 1993: 134 [distribution]. —Moulton and Stewart 1996: 127 [♂; distribution]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Zuellig et al. 2006: 43 [distribution]. —Houghton et al. 2011b: 6 [phenology habitat]. —Armitage et al. 2011: 14 [checklist]. —Myers et al. 2011: 108 [distribution]. —DeWalt et al. 2016: 57 [distribution]. —Houghton 2016: 46 [biology]. —Hunt 2017: 108 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, U.S.A.

frici (*Oxyethira*) Klapálek, 1891: 182 [type locality: [Czech Republic]; depository not designated; ♂]. —Morton 1893: 81 [♂]. —Ris 1894: 131 [distribution]. —Morton 1904: 327 [distribution]. —Martynov 1924: 57 [♂]. —Ulmer 1929: 260 [morphological notes; comparison with *O. falcata*]. —Martynov 1934: 154 [♂]. —Mosely 1939b: 285 [♂]. —Kimmins 1943: 155 [distribution]. —Schmid 1952: 656 [distribution]. —Kimmins 1958b: 15 [♀; distribution]. —Nybom 1960: 19 [checklist]. —Botosaneanu 1967: 293 [distribution]. —Solem 1970a: 2 [distribution]. —Tobias 1970: 226 [♂; distribution]. —Mogensen 1971: 13 [♂; distribution]. —Fahy 1972: 202 [distribution]. —Andersen 1974: 26

[distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 58, 60 [atlas; ♂; ♀]. —Kelley 1984a: 437 [checklist]. —Kumanski 1985: 144 [♂]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Tysse 1985: 84 [distribution]. —González et al. 1986: 113 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Spuris 1989: 17 [checklist]. —Andersen et al. 1990: 26 [distribution]. —Andersen et al. 1990: 52 [distribution]. —Andersen et al. 1993b: 3 [distribution]. —Andersen et al. 1993a: 51 [distribution]. —Andersen and Klausen 1994: 14 [distribution]. —Bagge 1995: 94 [distribution; biology]. —Czachorowski and Prishchepchik 1998: 11 [distribution]. —Gullefors 2002: 138 [checklist]. —Gullefors 2003: 194 [distribution]. —Malicky 2004a: 70, 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Gullefors 2005b: 138 [distribution]. —Komzák and Chvojka 2005: 66 [distribution]. —Robert 2007: 82 [checklist]. —Gullefors 2008: 64 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Hohmann 2010: 40 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Ivanov 2011: 195 [checklist]. —Andersen and Hagenlund 2012: 136 [distribution]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —O'Connor 2013: 65 [distribution]. —Martínez et al. 2015: 40 [distribution]. —O'Connor 2015: 28, 102 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 15, 19, 24 [conservation status].

Distribution. —Belarus, Czech Republic, Denmark, England, Finland, Germany, Ireland, Norway, Portugal, Russia, Scotland, Spain, Sweden.

garifosa (*Dampftrichia*) Moulton & Harris, 1997: 496 [type locality: Mexico, Tamaulipas, Municipio de Ciudad Victoria, Arroyo los Troncones, Ejido La Libertad, ca. 10 km NW Victoria; NMNH; ♂].

Distribution. —Mexico.

geminata (*Mesotrachia*) Flint & Sykora, 2004: 41 [type locality: Dominica Republic, La Vega Province, 11.5 km S of Constanza (1 km N El Convento), 18°51.7'N 70°41.0'W, 1410 m; NMNH; ♂; ♀]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic.

glasa (*Argyrobothrus*) (Ross, 1941a): 70 [type locality: United States, Oklahoma, Honey Creek, Turner Falls State Park; INHS; ♂; in *Loxotrachia*]. —Denning 1947a: 14 [distribution]. —Botosaneanu 1979: 40, 50 [♂; distribution]. —Blickle 1979: 54, 91 [checklist; ♂]. —Kelley and Morse 1982: 257, 264 [checklist; ♀]. —Harris et al. 1982a: 511 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Kelley 1984a: 438 [checklist]. —Holzenthal 1988: 63 [distribution]. —Harris et al. 1991: 248 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Holzenthal and Harris 1992: 173 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Flint 1996a: 16 [checklist]. —Moulton and Stewart 1996: 127 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Maes 1999: 1194 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Pescador et al. 2004: 134 [checklist].

—Naranjo López and González Lazo 2005: 149 [checklist]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Flint et al. 1994: 4 [distribution]. —Etnier 2010: 486 [distribution]. —Harris et al. 2012: 10 [checklist]. —Armitage et al. 2015b: 5 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Denson et al. 2016: 6 [distribution]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Cuba, Nicaragua, Panama, U.S.A.

graciliano (*Loxotrichia*) de Souza & Santos, 2017: 495 [type locality: Brazil, Alagoas, Quebrangulo, Reserva Biológica de Pedra Talhada, rio Caranguejo acima do alojamento, 9°15'26"S, 36°25'07"W; DZRJ; ♂]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Brazil.

grisea (*Oxyethira*) Betten, 1934: 162 [type locality: [United States], New York; depository not designated; ♂]. —Ross 1944: 138 [♂; distribution]. —Morse and Blickle 1953: 72 [checklist]. —Blickle 1979: 54, 97 [checklist; ♂]. —Roy and Harper 1979: 152 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Roy and Harper 1981: 105 [distribution]. —Kelley and Morse 1982: 257, 261 [checklist; ♀]. —Waltz and McCafferty 1983a: 11 [distribution]. —Lake 1984: 220 [distribution]. —Kelley 1984a: 437 [checklist]. —Harper 1989: 541 [distribution]. —Morse et al. 1989: 23 [distribution]. —Usis and Foote 1989: 84 [distribution]. —Harris et al. 1991: 249 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Floyd et al. 1993: 91 [phenology; distribution]. —Huryn and Harris 2000: 193 [distribution]. —Myers et al. 2011: 108 [distribution]. —Flint 2011: 104 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Harris et al. 2012: 10 [checklist]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

guariba (*Dactylotrichia*) de Souza & Santos, 2017: 490 [type locality: Brazil, Paraíba, Mamanguape, Reserva Biológica Guaribas, rio Barro Branco, casa da cabeça de boi, 6°43'7"S, 35°10'55"W; DZRJ; ♂]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Brazil.

harpagella (*Oxyethira*) Kimmins, 1951: 205 [type locality: [India], Assam, Shillong; NHMUK; ♂]. —Kelley 1984a: 437 [checklist].

Distribution. —India.

harpeodes (*Oxyethira*) Yang & Kelley in Yang et al. 1997: 101 [type locality: [China], Fujian Province, Jiouquxi, 230 m; NAUJ; ♂]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

hartigi (*Oxyethira*) Moretti, 1981: 169 [type locality: [Italy], Sardegna, Sorgente Monte, 450 m, Sassari; Collection Moretti; ♂]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 58 [atlas; ♂]. —Kelley 1984a: 437 [checklist]. —Malicky 2002: 4 [distribution]. —Malicky 2004a: 71 [atlas]. —Malicky 2005b: 547 [checklist]. —Cianficconi et al. 2007a: 67 [proposed as Italian endemic].

Distribution. —France, Italy.

hena (*Oxyethira*) Oláh & Ito, 2013: 39 [type locality: China, Henan Province, Lin county, Qi river, N36.06° E113.81°; NAUJ; ♂]. —Xue and Yang 1991: 21 [♂; distribution; misidentified as *O. ecornuta*, according to Oláh and Ito 2013: 39].

Distribution. —China.

hilosa (*Tanytrichia*) Holzenthal & Harris, 1992: 163 [type locality: Costa Rica, Alajuela, Río Pizote, 5 km (air) S Brasilia, 10.972°N, 85.345°W; NMNH; ♂]. —Bueno-Soria 1999: 117 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Mexico, Nicaragua, Panama.

hiroshima (*Oxyethira*) Oláh & Ito, 2013: 35 [type locality: Japan, Honshu, Hiroshima, Hatsukaichi-shi, Yoshiwa, Hosomidani, N34°33'01" E132°06'44", 820 m; CMB-ZI; ♂]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 10 [♂; ♀; distribution].

Distribution. —Japan.

houailou (*Trichoglène*) Wells & Johanson, 2015: 52 [type locality: New Caledonia, Province Nord, small fall ~ 10 km SW Houailou, on Bourail road; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

hozosa (unplaced) Harris & Davenport, 1999: 35 [type locality: Peru, Loreto, Rio Yanamono just below Explorama Lodge; NMNH; ♂].

Distribution. —Peru.

hyalina (unplaced) Müller, 1879a: 143 [type locality: Brazil, Santa Catarina; no type nor type depository designated; larval case; in *Lagenopsyche*]. —Ulmer 1905: 74 [to *Oxyethira*]. —Ulmer 1957: 172 [bibliography]. —Kelley 1984a: 442 [checklist]. —Angrisano 1999: 35 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 52 [checklist]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Brazil.

iannuzzae (*Dactylotrichia*) de Souza & Santos, 2017: 485 [type locality: Brazil, Alagoas, Quebrangulo, Reserva Biológica de Pedra Talhada, Rio Caranguejo, 2 km acima do alojamento, 9°15'03"S, 36°25'56"W, 814 m; DZRJ; ♂]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Brazil.

iglesiassi (*Oxyethira*) González & Terra, 1982: 299 [type locality: Portugal, Paúl, Ribeira do Paúl, 455 m; USCM; ♂]. —Kelley 1984a: 438 [checklist]. —Kelley 1986: 777 [taxonomic placement]. —Malicky 2004a: 70 [atlas]. —Malicky 2005b: 547 [checklist]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Portugal.

ikal (*Dampftrichia*) Wells & Huisman, 1992: 107 [type locality: West Malaysia, Bukit Rengit; NTM; ♂]. —Malicky 2010a: 42 [atlas; ♂].

Distribution. —Malaysia.

inaequispina (*Oxytrichia*) Flint, 1990: 118 [type locality: Chile, Prov. El Loa, brook of Toconao; IRSNB; ♂]. —Angrisano 1999: 34 [checklist].

Distribution. —Chile.

incana (*Dampftrichia*) Ulmer, 1906: 102 [type locality: [Indonesia]; ZMUH; ♂]. —Ulmer 1951: 70 [distribution; ♂]. —Kelley 1984a: 439 [checklist]. —Neboiss 1986: 82 [atlas; ♂]. —Wells 1990b: 392 [♂, ♀; distribution]. —Wells 1991: 491 [distribution]. —Wells and Malicky 1997: 186 [distribution]. —Malicky and Chantaramongkol 2007: 1029 [distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 34 [distribution]. —Malicky, 2010a: 42 [atlas; ♂]. —Malicky et al. 2014: 6 [distribution]. —Wells and Johanson 2015: 75 [♂; distribution]. —Wityi et al. 2015: 47 [checklist]. —Melnitsky et al. 2019: 539 [distribution]. —Johanson and Wells 2019: 93 [checklist]. —Wells et al. 2019: 33 [detection frequency].

—*australiensis* (Wells, 1981): 112 [type locality: [Australia] Queensland, Mt Spec, Little Crystal Creek; ANIC; ♂; in *Gnathotrichia*]. —Kelley 1984a: 439 [to synonymy].

—*excisa* (Kimmins, 1951): 209 [type locality: [Myanmar], Lower Burma, Thaton; NHMUK; ♂; in *Stenoxythira*]. —Kelley 1984a: 439 [to synonymy].

—*galekoluma* Schmid, 1958b: 68 [type locality: [Sri Lanka], Ceylan, Maturata (C. P., 2400 ft) 1-III, Belihul Oya, assez grande rivière torrentueuse, lit très rocheux et encaissé, dans les rizières; depository not designated; ♂]. —Kelley 1984a: 439 [checklist]. —Malicky and Chantaramongkol 2007: 1029 [to synonymy].

—*isabellina* (Ulmer, 1951): 60 [type locality: [India], Zentral-Sumatra, Pangkalang; ZMUH; ♂; in *Gnathotrichia*]. —Marshall 1979b: 207 [as synonym of *Stenoxythira excisa*]. —Kelley 1984a: 439 [to synonymy].

Distribution. —Australia, India, Indonesia, Malaysia, Myanmar, New Caledonia, Papua New Guinea, Sri Lanka, Thailand, Vietnam.

incurvata (*Trichoglène*) Wells & Johanson, 2015: 47 [type locality: New Caledonia, Province Nord, Mt Panié, 20.57306°S 164.77139°E, 902 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

indorsennus (*Pacificotrichia*) Kelley, 1989: 199 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells and Johanson 2015: 61 [♂; distribution]. —Johanson and Wells 2019: 93 [checklist].

—*tompa* Oláh & Johanson, 2010a: 34 [type locality: New Caledonia, Province Sud, W slope Mt. Ningua, Kwé Néco Stream, 3.9 km W summit of Mt. Ningua, on Bouloparis-Thio Road, about 50 m upstream road, 21°44.359'S 166°06.009'E, 117 m; MNHN; ♂]. —Wells and Johanson 2015: 61 [to synonymy].

Distribution. —New Caledonia.

insularis (*Trichoglène*) Kelley, 1989: 196 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells and Johanson 2015: 54 [♂; distribution]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

itascae (*Holarctotrichia*) Monson & Holzenthal, 1993: 438 [type locality: [United States], Minnesota, Clearwater County, Itasca State Park, Nicollet Creek at Wilderness Drive, 47.194°N, 92.230°W, 1500 ft.; UMSP; ♂]. —Houghton et al. 2001: 505 [distribution]. —Houghton and Holzenthal 2003: 39 [distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —U.S.A.

jamaicensis (*Mesotrichia*) Flint, 1968b: 44 [type locality: Jamaica, St. Andrew, Hope River near Newcastle at mile post 16.5; NMNH; ♂; ♀]. —Flint 1968a: 82 [checklist]. —Kelley 1984a: 440 [checklist]. —Botosaneanu 2002b: 89 [checklist].

Distribution. —Jamaica.

janella (*Loxotrichia*) Denning, 1948: 397 [type locality: United States, Florida, Winter Park; CAS; ♂]. —Flint 1968b: 42 [♂; ♀; distribution]. —Flint 1968a: 52 [♂; ♀; distribution]. —Bueno-Soria and Flint 1978: 205 [distribution]. —Botosaneanu 1979: 50 [distribution]. —Blickle 1979: 54, 93 [checklist; ♂]. —Kelley and Morse 1982: 257, 261 [checklist; ♀]. —Harris et al. 1982a: 511 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Malicky 1983c: 264 [distribution]. —Harris et al. 1984: 109 [distribution]. —Kelley 1984a: 442 [checklist]. —Kumanski 1987: 27 [distribution]. —Holzenthal 1988: 63 [distribution]. —Botosaneanu 1989: 101 [distribution]. —Botosaneanu 1990a: 47 [distribution]. —Botosaneanu 1991: 132 [distribution]. —Harris et al. 1991: 250 [distribution]. —Holzenthal and Harris 1992: 173 [distribution]. —Aguila 1992: 539 [distribution]. —Flint and Sykora 1993: 57 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Manuel and Bohart 1993: 139 [association between Trichoptera and Strepsiptera]. —Botosaneanu 1994a: 42 [distribution]. —Botosaneanu 1995a: 32 [distribution]. —Flint 1996b: 98 [distribution]. —Flint 1996a: 16 [checklist]. —Moulton and Stewart 1996: 127 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Floyd et al. 1997: 136 [distribution]. USA —Botosaneanu and Hyslop 1998: 16 [distribution]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 88 [checklist]. —Pescador et al. 2004: 133 [checklist]. —Flint and Sykora 2004: 43 [distribution]. —Botosaneanu and Thomas 2005: 55 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Zeullig et al. 2006: 43 [distribution]. —Bowles et al. 2007: 22 [distribution biology]. —Pérez-Gelabert 2008: 301 [checklist]. —Harris et al. 2012: 10 [checklist]. —Denson et al. 2016: 6 [distribution]. —Armitage et al. 2016: 11 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution]. —Barba-Álvarez et al. 2019: 86 [distribution].

—***neglecta*** (*Loxotrichia*) Flint, 1964: 57 [type locality: Puerto Rico, Maricao, fish hatchery; NMNH; ♂; ♀]. —Flint 1968b: 42 [to synonymy].

Distribution. —Barbados [?], Costa Rica, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Martinique [?], Mexico, Panama, Puerto Rico, St Lucia, St. Vincent, U.S.A.

kelleyi (*Holarctotrichia*) Harris in Harris and Armitage 1987: 106 [type locality: [United States], Florida, Okaloosa Co., Turkey Creek at Base Road 233, Eglin Air Force Base, 5.0 mile NW Niceville; NMNH; ♂]. —Pescador et al. 2004: 134 [checklist]. —Harris et al. 2012: 10 [checklist].

Distribution. —U.S.A.

kerek (*Dactylotrichia*) Oláh & Johanson, 2011: 132 [type locality: Peru, San Martin Prov., Rio Negro, 37 km (rd.) W Moyobamba, near Olmos-Tarapoto rd., 6°00.278'S, 77°15.437'W; NHRS; ♂].

Distribution. —Peru.

kingi (*Dactylotrichia*) Holzenthal & Kelley, 1983: 471 [type locality: [United States], Florida, Miami, Plant Inspection Station; NMNH; ♂]. —Pescador et al. 2004: 134 [checklist]. —Harris et al. 2012: 11 [checklist].

Distribution. —U.S.A.

kirikiriroa (*Trichoglène*) Smith, 2008: [type locality: [New Zealand], WO, Kirikiriroa Stm, Mangaiti Reserve, Hamilton, E2710781, N6382111; NZAC; ♂].

Distribution. —New Zealand.

klingsbedti (*Oxyethira*) Nybom, 1983: 65 [type locality: Finland, Fennoscandia, Kuusamo, Posio; MZHF; ♂]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Gullefors 2001: 188 [distribution]. —Gullefors 2002: 138 [checklist]. —Malicky 2004a: 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Gullefors 2008: 63 [checklist]. —Tobias et al. 2009: 25 [♀]. —Ivanov 2011: 195 [checklist]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Gullefors 2016: 155 [checklist].

Distribution. —Finland, Sweden.

lagunita (*Dampftrichia*) Flint, 1980b: 142 [type locality: Argentina, Pcia. Entre Rios, Arroyo P. Verne, 4 km N Villa San José; NMNH; ♂]. —Flint 1982b: 42 [distribution]. —Kelley 1984a: 440 [checklist]. —Angrisano 1995a: 510 [distribution]. —Mangeaud 1996: 154 [distribution]. —Angrisano 1999: 34 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Angrisano and Sganga 2007: 36 [♂; distribution]. —Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 52 [checklist]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Argentina, Brazil, Uruguay.

longipenis (*Oxytrichia*) Santos, Henriques-Oliveira, & Nessimian, 2009: 40 [type locality: Brazil, Amazonas, Manaus, tributary to Rio Cuieiras, 02°42'25.1"S, 60°22'28.2"W; INPA; ♂; compared with species in *O. (Oxitrichia)*]. —Paprocki and França 2014: 52 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

longispinosa (*Dampftrichia*) Kumanski, 1987: 29 [type locality: Cuba, Province Pinar del Rio, Rio El Ballio near Isabel Rubio village, or Rio Esmeralda near Vinales; SOFM; ♂]. —Flint 1996a: 16 [checklist]. —Botosaneanu and Hyslop 1998: 16 [distribution; as *mirebalina* or *longispinosa*]. —Botosaneanu 2002b: 87 [checklist].

Distribution. —Cuba, Jamaica [?].

longissima (*Tanytrichia*) Flint, 1974b: 66 [type locality: Suriname, Republiek; RMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Santos et al. 2009: 42 [distribution]. —Paprocki and França 2014: 52 [checklist]. —Rocha et al. 2018: 153 [checklist]. —Moreno et al. 2020: 266 [distribution].

Distribution. —Brazil, Suriname.

luanae (*Tanytrichia*) Santos, Henriques-Oliveira, & Nessimian, 2009: 37 [type locality: Brazil, Amazonas, Manaus, tributary to Igarapé da Cachoeira, basin of Rio Ciueiras, 02°41'46.0"S, 60°17'42.7"W; INPA; ♂]. —Paprocki and França 2014: 52 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

lumipollex (*Oxyethira*) Kelley & Harris, 1983: 184 [type locality: [United States], Alabama, Mobile County, Bennett Creek, 6 miles west of Citronelle; NMNH; ♂]. —Harris et al. 1984: 109 [distribution]. —Harris et al. 1991: 251 [distribution].

Distribution. —U.S.A.

lumosa (*Oxyethira*) Ross, 1948: 204 [type locality: [United States], Florida, Daytona Beach; INHS; ♂]. —Blickle 1979: 54, 97 [checklist; ♂]. —Kelley and Morse 1982: 257, 267 [checklist; ♀]. —Kelley 1984a: 437 [checklist]. —Harris et al. 1991: 252 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Pescador et al. 2004: 134 [checklist]. —Harris et al. 2012: 11 [checklist]. —Denson et al. 2016: 6 [distribution].

Distribution. —U.S.A.

† ***lurida*** (unplaced) Melnitsky & Ivanov, 2016: 283 [type locality: [Ukraine], Rovno Amber, Bartonian, Eocene; IZSK; ♂; ♀].

Distribution. —Rovno amber.

macropennis (unplaced) Wells & Johanson, 2015: 76 [type locality: New Caledonia, Province Sud, south of Plaine des Lacs, 4.0 km N Prony, 22°16.906'S 166°49.402'E; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

macrosterna (*Tanytrichia*) Flint, 1974b: 67 [type locality: Suriname, Nickerie River, Blanche Marie, falls in creek; RMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Angrisano 1999: 34 [checklist]. —Santos et al. 2009: 42 [distribution]. —Oláh and Johanson 2011: 134 [distribution]. —Paprocki and França 2014: 52 [checklist]. —de Souza and Santos 2017: 505 [distribution]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil, French Guiana, Suriname.

maranhensis (unplaced) de Souza & Santos, 2017: 495 [type locality: Brazil, Maranhão, Carolina, Parque Nacional da Chapada das Mesas, riacho Cancela atrás da Fazenda Cancela, 7°6'43"S, 47°17'46"W, 186 m; DZRJ; ♂]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

maryae (*Oxytrichia*) Kelley, 1983: 53 [type locality: Colombia, Meta Dept, Refugio Macarena; NMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

matadero (*Dactylotrichia*) Harper & Turcotte, 1985: 138 [type locality: Ecuador, small stream, outlet of Laguna Verde Cocha, near junction with Rio Matadero, Chirimachay, Quinuas Valley; UMQ; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

maya (*Dampftrichia*) Denning, 1947a: 16 [type locality: United States, Georgia, Macon; ESUW; ♂]. —Ross 1948: 257 [distribution]. —Zimmerman 1957: 173 [checklist; adult]. —Adachi 1958: 328 [distribution]. —Beardsley 1960: 181 [distribution]. —Beardsley 1971: 15 [distribution]. —Blickle 1979: 54, 95 [checklist; ♂]. —Kelley and Morse 1982: 257, 263 [checklist; ♀]. —Kelley 1984a: 440 [checklist]. —Harris et al. 1991: 253 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Flint et al. 2003: 34 [♀; distribution; introduced to Hawaii]. —Pescador et al. 2004: 134 [checklist]. —Bowles et al. 2007: 22 [distribution; biology]. —Harris et al. 2012: 11 [checklist]. —Armitage et al. 2015b: 6 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Denson et al. 2016: 6 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Evenhuis et al. 2020: 27 [distribution].

Distribution. —Mexico, Panama, U.S.A.

mcgregori (unplaced) Harris & Huryn, 2000: 78 [type locality: [United States], Alabama, Lauderdale County, Cowpen Creek @ Co. Hwy. 8; NMNH; ♂].

Distribution. —U.S.A.

mekunna (*Oxyethira*) Oláh & Ito, 2013: 36 [type locality: Japan, Hokkaido, Shiribeshi, Iwanai-cho, Mekkunai-shitsugen, marsh, N42°52'24" E140°30'17", 900 m; CMB-ZI; ♂]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 12 [♂; ♀; distribution].

Distribution. —Japan.

melasma (*Pacifcotrichia*) Kelley, 1989: 200 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells 1995: 233 [distribution]. —Wells and Johanson 2015: 68 [♂; distribution; note about mismatch between original description and type specimen]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

merga (*Tanytrichia*) Kelley, 1983: 45 [type locality: Venezuela, Bolivar State, Rio Cuyuni, El Dorado; NMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Flint 1991a: 70 [distribution]. —Angrisano 1999: 34 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 52 [checklist]. —de Souza and Santos 2017: 505 [distribution]. —Rocha et al. 2018: 153 [checklist]. —Moreno et al. 2020: 266 [distribution].

Distribution. —Brazil, Venezuela.

michiganensis (*Holarctotrichia*) Mosely, 1934a: 153 [type locality: U.S.A., Michigan; NHMUK; ♂]. —Blickle and Morse 1954: 122 [♂; distribution]. —Etnier 1965: 147 [distribution]. —Roy and Harper 1979: 152 [checklist]. —Blickle 1979: 54, 91 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Kelley and Morse 1982: 257, 265 [checklist; ♀]. —Huryn and Foote 1983: 791 [distribution]. —Kelley 1984a: 438 [checklist]. —Usis and Foote 1989: 84 [distribution]. —Harper 1989: 541 [distribution]. —Morse et al. 1989:

23 [distribution]. —Harris et al. 1991: 254 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Monson and Holzenthal 1993: 442 [checklist]. —Floyd et al. 1997: 136 [distribution]. USA —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Houghton et al. 2011b: 6 [phenology habitat]. —Myers et al. 2011: 108 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist]. —*sodalis* Ross & Spencer, 1952: 46 [type locality: [Canada] Soda Creek, British Columbia; INHS; ♂]. —Blickle 1979: 54 [distribution, to synonymy].

Distribution. —Canada, U.S.A.

miea (*Oxyethira*) Oláh & Ito, 2013: 42 [type locality: Japan, Honshu, Mie, Taisei-cho, N36°19' E136°26'; CMB-ZI; ♂]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 14 [♂; ♀; distribution]. —Park et al. 2018: 107 [♂; ♀; distribution]. —Park and Kong 2020: 297 [checklist].

Distribution. —South Korea.

mienica (*Trichoglène*) Wells, 1981: 108 [type locality: [Australia] Tasmania, Ouse River, 5 miles W. of Miena ANIC; ♂; ♀]. —Kelley 1984a: 436 [checklist]. —Neboiss 1986: 83 [atlas; ♂; ♀]. —Neboiss 2002: 54 [checklist].

Distribution. —Australia.

minima (*Dampfitrichia*) (Kimmins, 1951): 208 [type locality: [Myanmar], S. Shan States, Inle Lak, S. end, 900 m; NHMUK; ♂; in *Stenoxethira*]. —Kelley 1984a: 438 [checklist]. —Wityi et al. 2015: 47 [checklist].

Distribution. —Myanmar.

mirabilis (*Oxytrichia*) Morton, 1904: 327 [type locality: [Scotland], Loch Eigheach, Rannoch, Perthshire; depository not designated; ♂]. —Siltala 1908: 16 [distribution]. —Mosely 1939b: 289 [♂]. —Nybom 1960: 19 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Andersen 1974: 26 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Nybom 1983: 65 [distribution]. —Malicky 1983b: 59, 60 [atlas; ♂; ♀]. —Kelley 1984a: 440 [checklist]. —Andersen and Tyssse 1985: 84 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Harper 1989: 541 [distribution]. —Spuris 1989: 17 [checklist]. —Holmes et al. 1992: 202 [distribution]. —Moulton and Harris 1999: 550 [♂; distribution]. —Gullefors 2002: 138 [checklist]. —Malicky 2004a: 71, 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Gullefors 2008: 63 [checklist]. —Ivanov 2011: 196 [checklist]. —Andersen and Hagenlund 2012: 136 [distribution]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Pan'kov and Krasheninnikov 2016: 333 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 15, 17, 18, 24 [conservation status]. —O'Connor 2019b: 231 [distribution].

—*barnstoni* Harper, 1976: 35 [type locality: [Canada], Québec, Radissonie, tourbière (Station SB-153) au nord du lac Nathalie (lac B-160) dans le bassin hydrographique de la Rivière du Castor, un tributaire de la Baie James, 53°25'20"N, 77°25'30"W; UMQ; ♀]. —Blickle 1979: 54, 95 [checklist; ♂]. —Roy and Harper 1979: 151 [checklist]. —Blickle 1980: 102 [♂]. —Kelley and Morse 1982: 258 [to synonymy].

Distribution. —Canada, Finland, Ireland, Norway, Russia, Scotland, Sweden, U.S.A, Wales.

mirebalina (*Dampftrichia*) Botosaneanu, 1991: 130 [type locality: Haiti, Département de l'Ouest, Grande rivière d'Artibonite à Mirebalais; ZMUA; ♂; ♀]. —Botosaneanu 1995a: 29 [distribution]. —Botosaneanu and Hyslop 1998: 16 [distribution; as *mirebalina* or *longispinosa*]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Flint and Sykora 2004: 41 [distribution; ♀ allotype is actually *Oxyethira simulatrix*]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic, Haiti, Jamaica [?].

misionensis (*Dactylotrichia*) Angrisano, 1995b: 30 [type locality: Argentina, Misiones, Posadas; MACN; ♂]. —Angrisano 1999: 34 [checklist].

Distribution. —Argentina.

mithi (*Oxyethira*) Malicky, 1974: 109 [type locality: [Greece], Kreta, Mithi; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 59 [atlas; ♂]. —Kelley 1984a: 437 [checklist]. —Malicky 2004a: 71, 72 [atlas]. —Malicky 2005b: 547 [checklist] —Malicky 2005a: 68 [distribution].

Distribution. —Greece.

mocoi (unplaced) Angrisano, 1995b: 34 [type locality: Argentina, Entre Rios, Parque Nacional El Palmar; MACN; ♂]. —Angrisano 1999: 35 [checklist]. —Angrisano and Sganga 2007: 38 [♂; distribution].

Distribution. —Argentina.

mouirange (*Pacificotrichia*) Wells & Johanson, 2015: 65 [type locality: New Caledonia, Province Sud, Monts Ksa Ne Mwa, on road between Noumea and Yaté, 2.0 km E Pic Mouirange, 22°12.356'S 166°40.798'E, 220 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

nehoue (*Pacificotrichia*) Wells & Johanson, 2015: 69 [type locality: New Caledonia, Province Nord, Rivière Néhoué, camp Amenage de Néhoué, 20°25.037'S 164°13.222'E, 12 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

novasota (*Oxyethira*) Ross, 1944: 138 [type locality: [United States], Texas, Marquez, along Novasota River; INHS; ♂; ♀]. —Edwards 1973: 506 [distribution]. —Blickle 1979: 54, 97 [checklist; ♂]. —Kelley and Morse 1982: 257, 261 [checklist; ♀]. —Harris et al. 1982a: 512 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Harris et al. 1984: 109 [distribution]. —Kelley 1984a: 437 [checklist]. —Bowles and Mathis 1989: 240 [distribution]. —Harris et al. 1991: 255 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Moulton and Stewart 1996: 128 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Pescador et al. 2004: 134 [checklist]. —DeWalt and Heinold 2005: 42 [phenology; distribution]. —Etnier 2010: 486 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Harris et al. 2012: 11 [checklist]. —Denson et al. 2016: 6 [distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —U.S.A.

nyultka (*Tanytrichia*) Oláh & Johanson, 2011: 134 [type locality: French Guiana, Approuaguekaw, Kaw Mt 4°32.833'N 52°11.452'W; NHRS; ♂].

Distribution. —French Guiana.

obscura (*Oxytrichia*) Flint, 1974b: 69 [type locality: Suriname, Suriname River, Botopasie; RMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Angrisano 1995a: 510 [distribution]. —Angrisano 1999: 34 [checklist].

Distribution. —Suriname, Uruguay.

obtatus (*Holarctotrichia*) Denning, 1947b: 172 [type locality: [United States], Minnesota, St. Paul; UMSP; ♂]. —Etnier 1965: 147 [checklist]. —Roy and Harper 1979: 152 [checklist]. —Blickle 1979: 54, 93 [checklist; ♂]. —Marshall and Larson 1982: 31 [distribution]. —Kelley 1984a: 438 [checklist]. —Lake 1984: 220 [distribution]. —Harper 1989: 541 [distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Houghton et al. 2011b: 6 [phenology; distribution; habitat]. —Myers et al. 2011: 108 [distribution]. —Wright et al. 2013: 466 [biology; distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

okinawa (*Oxyethira*) Oláh & Ito, 2013: 43 [type locality: Japan, Ryukyu Islands, Okinawa, Nago-shi, Genka-kawa, near Hogen-hashii, N26°36' E128°05'; CMB-ZI; ♂]. —Tanida and Kuranishi 2016: 72 [checklist]. —Ito and Oláh 2017: 16 [♂; ♀; distribution].

Distribution. —Japan.

oropedion (*Pacificotrichia*) Kelley, 1989: 200 [type locality: New Caledonia, Plateau de Dogny; BPBM; ♂]. —Wells 1995: 233 [distribution]. —Wells and Johanson 2015: 56 [♂; distribution]. —Johanson and Wells 2019: 93 [checklist].

—*derek* Oláh & Johanson, 2010a: 31 [type locality: New Caledonia, Province Sud, Creek Froid, 10 m upstream bridge on La Foa-Koindé road, 200 m W crossroad to Quipouin, 21°38.581'S 165°56.672'E, 180 m; MNHN; ♂]. —Wells and Johanson 2015: 56 [to synonymy].

Distribution. —New Caledonia.

orellanai (*Tanytrichia*) Harris & Davenport, 1992: 465 [type locality: Peru, Loreto, Rio Sucusari just up stream from Explornapo Camp; NMNH; ♂].

Distribution. —Peru.

ortizorum (*Mesotrichia*) Botosaneanu, 1995a: 29 [type locality: Dominican Republic, Arroyo el Dulce, sección Manavao-Los Dajaos of Jarabacoa; ZMUA; ♂]. —Botosaneanu 2002b: 88 [checklist]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Flint and Sykora 2004: 41 [distribution]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic.

ouenghi (*Pacificotrichia*) Wells & Johanson, 2015: 65 [type locality: New Caledonia, Province Nord, Bouérabate Stream, S Mont Ninndo, along road Barabache-Boulagoma, 20°17.409'S 164°11.242'E, 60 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

ozea (*Oxyethira*) Oláh & Ito, 2013: 41 [type locality: Japan, Honshu, Gumma, Oze, Yamanohama, N36°55' E139°13', 1400 m; CMB-ZI; ♂]. —Tanida and Kuranishi 2016: 73 [checklist]. —Ito and Oláh 2017: 18 [♂; distribution].

Distribution. —Japan.

palisada (*Argyrobothrus*) Wells & de Moor, 2020: 503 [type locality: Angola, Moxico Province, Cuanavale River, Site 3 — Cuanavale source lake (at Mokoro), -13.0898, 18.89395; AGMS; ♂].

Distribution. —Angola.

pallida (*Dampftrichia*) (Banks, 1904a): 215 [type locality: [United States, Washington, D. C.], Potomac river near the Long Bridge; Collection Banks; ♂; in *Orthotrichia*]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 152 [checklist]. —Ross 1938b: 10 [to *Oxyethira*]. —Ross 1944: 137 [♂; ♀; distribution]. —Ross 1948: 204 [distribution]. —Morse and Blickle 1953: 72 [checklist]. —Etnier 1965: 148 [distribution]. —Resh et al. 1978: 383 [distribution]. —Blickle 1979: 54; 95 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Kelley and Morse 1982: 257, 263 [checklist; ♀]. —Harris et al. 1982a: 512 [distribution]. —Waltz and McCafferty 1983a: 11 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Hamilton et al. 1983: 19 [distribution]. —Kelley 1984a: 440 [checklist]. —Lake 1984: 220 [distribution]. —Harris et al. 1984: 109 [distribution]. —Dewey 1986: 156 [biology]. —Bowles and Mathis 1989: 240 [distribution]. —Tarter 1990: 239 [checklist]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Harris et al. 1991: 256 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Moulton et al. 1994: 171 [distribution]. —Moulton et al. 1994: 171 [distribution]. —Moulton and Stewart 1996: 128 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Keiper et al. 1998b: 87 [biology]. —Ruiter 1999: 166 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 134 [checklist]. —DeWalt and Heinold 2005: 42 [phenology; distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Zeullig et al. 2006: 43 [distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Armitage et al. 2011: 14 [checklist]. —Flint 2011: 104 [distribution]. —Harris et al. 2012: 11 [checklist]. —Houghton et al. 2011b: 6 [phenology habitat]. —Denson et al. 2016: 6 [distribution]. —Houghton 2016: 46 [biology]. —DeWalt et al. 2016: 52 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 119 [checklist]. —Bowles et al. 2020: 8 [distribution].

—**cibola** Denning, 1947a: 12 [type locality: [United States], Georgia, Macon; ESUW; ♂]. —Denning 1947a: 148 [distribution]. —Ross 1948: 204 [to synonymy].

—**viminalis** Morton, 1905: 71 [type locality: [United States], Ithaca, New York; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 163 [checklist]. —Ross 1938a: 10 [to synonymy].

Distribution. —U.S.A.

paludicola (*Dampftrichia*) Wells & Yule, 2008 [type locality: Peninsular Malaysia, Selangor, Peat Swamp Forest, 03°39'6.3"N 101°15'12.2"E, irrigation drain; ZRC; ♂]. —Malicky and Chantaramongkol 2007: 1029 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 42 [atlas; ♂].

Distribution. —Indonesia, Malaysia.

parazteca (*Loxotrichia*) Kelley, 1983: 53 [type locality: Ecuador, Cotopaxi Prov., 133 km W Latacunga; NMNH; ♂]. —Kelley 1984a: 442 [checklist]. —Holzenthall 1988: 63 [distribution]. —Holzenthall and Harris 1992: 173 [distribution]. —Armitage et al. 2016: 11 [distribution]. —Ríos-Touma et al. 2017: 11 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Ecuador, Panama.

parce (*Loxotrichia*) (Edwards & Arnold, 1961): 405 [type locality: United States, Texas, Caldwell Co., San Marcos River; type destroyed; ♂; in *Protoptila*]. —Etnier 1968: 191 [distribution]. —Flint 1981: 30 [as synonym of *O. azteca*]. —Flint 1991b: 51 [♂; distribution]. —Flint and Reyes 1991: 487 [♂; ♀; distribution]. —Holzenthall and Harris 1992: 173 [distribution]. —Flint 1996b: 99 [distribution]. —Mangeaud 1996: 154 [distribution]. —Harris et al. 1996: 240 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Angrisano 1999: 34 [checklist]. —Muñoz-Quesada 2000: 278 [checklist]. —Botosaneanu 2002b: 88 [checklist]. —Botosaneanu and Vilorio 2002: 12 [checklist]. —Blahnik et al. 2004: 5 [distribution]. —Paprocki et al. 2004: 12 [checklist]. —Muzón et al. 2005: 57 [distribution]. —Rueda Martín 2011: 9 [♂; distribution]. Santos et al. 2009: 36 [checklist]. —Paprocki and França 2014: 52 [checklist]. —Isa Miranda and Rueda Martín 2014: 199 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Ríos-Touma et al. 2017: 11 [distribution]. —Rocha et al. 2018: 152 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guyana, Mexico, Panama, Peru, Trinidad, Venezuela, U.S.A.

parinsularis (*Trichoglène*) Wells & Johanson, 2015: 55 [type locality: New Caledonia, Province Sud, Mt Dzumac, source stream of Ouinne River, near crosspoint to mountain track, 22°02.073'S 166°28.460'E, 810 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

paritentacula (*Tanytrichia*) Kelley, 1983: 45 [type locality: Belize, Cayo Dist., Rio Privassion, Blancaneaux Lodge; NMNH; ♂]. —Kelley 1984a: 440 [checklist].

Distribution. —Belize.

pembertonensis (*Oxytrichia*) Harris & Flint, 2016: 5 [type locality: Canada, British Columbia, Pemberton, Pemberton Creek, N50 18.9', W122 48.2'; NMNH; ♂; ♀].

Distribution. —Canada.

perignonica (*Trichoglène*) Wells & Johanson, 2015: 45 [type locality: New Caledonia, Province Sud, stream draining to Marais de la Rivière Blanche, 5 km SW Pont Pérignon, 22°09.513'S 166°39.942'E, 180 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

peruviana (unplaced) Harris & Davenport, 1999: 33 [type locality: Peru, Loreto, tributary to Rio Yanamono at Explorama Lodge; NMNH; ♂]. —Santos et al. 2009: 43 [distribution]. —Paprocki and França 2014: 53 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil, Peru.

pescadori (*Oxyethira*) Harris & Keth, 2002: 74 [type locality: [United States], Alabama, Henry County, East Fork of Choctawhatchee River at Co. Hwy. 40, 10.5 km WSW Abbeville, T7N, R27E, S29; NMNH; ♂]. —Pescador et al. 2004: 134 [checklist]. —Etnier 2010: 486 [distribution]. —Harris et al. 2012: 11 [checklist]. —Denson et al. 2016: 6 [distribution].

Distribution. —U.S.A.

petei (*Oxytrichia*) Angrisano, 1995b: 29 [type locality: Argentina, Entre Rios, Parque Nacional el Palmar; MACN; ♂]. —Angrisano 1999: 34 [checklist]. —Angrisano and Sganga 2007: 36 [♂; distribution].

Distribution. —Argentina.

picita (*Tanytrichia*) Harris & Davenport, 1999: 35 [type locality: Peru, Loreto, edge of Rio Sucusari backwater, adjoining Explornapo Camp; NMNH; ♂]. —Santos et al. 2009: 43 [distribution]. —Thomson and Holzenthal 2012: 31 [distribution]. —Paprocki and França 2014: 53 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil, Peru, Venezuela.

ping (*Oxyethira*) Malicky & Chantaramongkol, 2007: 1028 [type locality: Thailand, Prov. Chiangmai, Mae Ping bei Elephant Camp, 16 km S von Chiang Dao; Collection Malicky; ♂]. —Malicky 2010a: 41 [atlas; ♂].

Distribution. —Thailand.

pirisinui (*Oxyethira*) Moretti, 1981: 170 [type locality: [Italy], Isola Capraia, Vado del Porto, 10 m; Collection Moretti; ♂]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 60 [atlas; ♂]. —Kelley 1984a: 438 [checklist]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Malicky 2004a: 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Cianficconi et al. 2007: 67 [proposed as Italian endemic].

Distribution. —Italy.

plumosa (*Dampftrichia*) (Wells, 1981): 117 [type locality: [Australia] North Queensland, Mulgrave River; NMV; ♂; in *Stenoxxyethira*]. —Kelley 1984a: 438 [checklist]. —Neboiss 1986: 82 [atlas; ♂]. —Wells 1991: 491 [distribution]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia, Papua New Guinea.

poapi (unplaced) Angrisano & Sganga, 2009: 67 [type locality: Argentina, Misiones, Parque Provincial Salto Encantado MACN; ♂].

Distribution. —Argentina.

presilla (unplaced) Harris & Davenport, 1999: 29 [type locality: Peru, Loreto, Yanamono Creek at jungle's edge, near Explorama Lodge; NMNH; ♂]. —Santos et al. 2009: 43 [distribution]. —Paprocki and França 2014: 53 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil, Peru.

pseudofalcata (*Oxyethira*) Ivanov, 1992: 239 [type locality: [Tajikistan], Pamir, Vanch region, 24 km E Vanch, source Zak on the left bank of river Vanch; ZIN; ♂; ♀].

Distribution. —Tajikistan.

puertoricensis (*Loxotrichia*) Flint, 1964: 55 [type locality: Puerto Rico, Maricao, at fish hatchery; NMNH; ♂; ♀; larva; case]. —Flint 1968b: 40 [distribution]. —Flint 1968a: 82 [checklist]. —Kelley 1984a: 442 [checklist]. —Botosaneanu 1991: 132 [distribution]. —Botosaneanu 1995a: 32 [distribution]. —Flint 1996a: 16 [checklist as *quelinda*]. —Botosaneanu and Hyslop 1998: 17 [distribution]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Botosaneanu 2002b: 88 [checklist]. —Flint and Sykora 2004: 44 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Pérez-Gelabert 2008: 30 [checklist].

—*quelinda* (*Loxotrichia*) (Botosaneanu), 1977: 267 [type locality: Cuba, Oriente, Baracoa, Rio Sabanilla; NMNH; ♂; in *Loxotrichia*]. —Botosaneanu 1979: 50 [distribution]. —Kelley 1984a: 442 [checklist]. —Botosaneanu 1995a: 32 [to synonymy].

Distribution. —Cuba, Dominican Republic, Haiti, Jamaica, Puerto Rico.

quadrata (*Pacificotrichia*) Wells & Johanson, 2015: 60 [type locality: New Caledonia, Province Sud, Mt Dzumac, source stream of Ouinne River, near crosspoint to mountain track, 22°02.073'S 166°28.460'E, 810 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

quadrilobata (*Loxotrichia*) Rocha, Dumas, & de Souza, 2018: 150 [type locality: Brazil, Minas Gerais, São Roque de Minas, Parque Nacional da Serra da Canastra, parte baixa da Cachoeira Casca D'anta, Rio São Francisco, 20°18.54'S, 46°31.37'W, ca 900 m elev; DZRJ; ♂].

Distribution. —Brazil.

quinguaginta (unplaced) Kelley, 1983: 54 [type locality: Ecuador, Pastaza Prov., Puyo; NMNH; ♂]. —Kelley 1984a: 442 [checklist]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

quiramae (*Dactylotrichia*) Thomson & Holzenthal, 2012: 31 [type locality: Venezuela, Guárico, UCV San Nicolasito Field Station, 08°8.296'N, 66°24.459'W, 62 m; UMSP; ♂].

Distribution. —Venezuela.

rachanee (*Dampftrichia*) Chantaramongkol & Malicky, 1986: 516 [type locality: [Sri Lanka], Central Province, Bacj 2 mi E von Madugoda, 18 mi E von Kandy, 800 m; MZLU; ♂].

Distribution. —Sri Lanka.

rafaeli (unplaced) de Souza & Santos, 2017: 493 [type locality: Brazil, Piauí, Piracuruca, Parque Nacional de Sete Cidades, Riacho Piedade, 4°06'34"S, 41°43'39"W, 169 m; CZMA; ♂]. —Rocha et al. 2018: 153 [checklist]. —Moreno et al. 2020: 266 [distribution].

Distribution. —Brazil.

ramosa (*Oxyethira*) Martynov, 1936: 306 [type locality: [India], Rewah State, C. I.; NZSI; ♀]. —Malicky and Chantaramongkol 2007: 1029 [distribution]. —Mattern 2015: 502 [distribution]. —Malicky 2018: 49 [checklist].

—*angustella* Martynov, 1935: 112 [type locality: [India], Rewah State, C. I.; NZSI; ♀]. —Martynov 1936: 306 [as replacement]. —Kelley 1984a: 437 [checklist]. —Malicky and Chantaramongkol 2007: 1029 [♂; distribution].

—*laodameia* Malicky, 2004b: 296 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), unweit des Wehrs des Babai Flusses, über das die Brücke der Ost-West-Hauptstraße Nepals (Mahindra Highway), 28°25'N, 81°23'E, 190 m; Collection Malicky; ♂]. —Malicky 2006: 253 [checklist].

Distribution. —India, Nepal.

rareza (unplaced) Holzenthal & Harris, 1992: 33 [type locality: Costa Rica, Alajuela, Río Pizote, 5 km N Dos Ríos, 10.948°N, 85.291°W; NMNH; ♂]. —Armitage et al. 2016: 11 [distribution]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Panama.

redunca (unplaced) Thomson & Holzenthal, 2012: 33 [type locality: Venezuela, Bolívar, Gran Sabana, E. Pauji, "Río Curvita", 4°31.237'N, 61°31.591'W, 869 m; UMSP; ♂].

Distribution. —Venezuela.

retracta (*Trichoglène*) Wells, 1981: 110 [type locality: [Australia] Western Australia, Serpentine River, Serpentine Falls; NMV; ♂; ♀]. —Kelley 1984a: 436 [checklist]. —Neboiss 1986: 84 [atlas; ♂; ♀].

Distribution. —Australia.

retrosa (*Dactylotrichia*) de Souza & Santos, 2017: 486 [type locality: Brazil, Sergipe, Itabaiana, Parque Nacional de Serra de Itabaiana, Riacho dos Negros, 10°44'50"S, 37°20'24"W, 202 m; DZRJ; ♂]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Brazil.

ritae (*Loxotrichia*) Angrisano, 1995a: 510 [type locality: Uruguay, Paysandu, Sta. Rita; FHCU; ♂]. —Angrisano 1999: 34 [checklist].

Distribution. —Uruguay.

rivicola (*Oxyethira*) Blickle & Morse, 1954: 121 [type locality: [United States], Lee, N. H.; INHS; ♂]. —Etnier 1965: 148 [distribution]. —Blickle 1979: 54, 93 [checklist]. —Roy and Harper 1979: 152 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Parker and Voshell 1981: 4 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Kelley and Morse 1982: 257, 264 [checklist; ♀]. —Kelley 1984a: 437 [checklist]. —Harper 1989: 541 [distribution]. —Bowles and Mathis 1989: 240 [distribution]. —Harper 1990: 49 [distribution; biology]. —Harris et al. 1991: 257 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Monson and Holzenthal 1993: 442 [checklist]. —Moulton and Stewart 1996: 129 [♂; distribution]. —Floyd et al. 1997: 136 [distribution]. USA —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Etnier 2010: 486 [distribution]. —Myers et al. 2011: 109 [distribution]. —Houghton et al. 2011b: 6 [phenology; habitat]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

roberti (*Argyrobothrus*) Roy & Harper, 1980: 117 [type locality: [Canada], les Basses laurentides, dans la partie supérieure du bassin hydrographique de la rivière l'Achigan, 46°00'N, 74°00'O, lac Tracy (Cromwell); UMQ; ♂]. —Roy and Harper 1981: 105 [distribution]. —Kelley 1984a: 438 [checklist]. —Harris et al. 1991: 258 [distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Pescador et al. 2004: 134 [checklist]. —Harris et al. 2012: 11 [checklist]. —Denson et al. 2016: 6 [distribution].

—***leonensis*** Kelley, 1981: 374 [type locality: [United States], Florida, Leon Co., Tall Timbers Res. Sta.; NMNH; ♂]. —Kelley and Morse 1982: 257 [checklist]. —Kelley 1984a: 438 [to synonymy].

Distribution. —Canada, U.S.A.

rossi (*Oxyethira*) Blickle & Morse, 1957: 48 [type locality: [United States], Bow, N.H. [New Hampshire]; INHS; ♂]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 54, 95 [checklist; ♂]. —Kelley and Morse 1982: 257, 264 [checklist; ♀]. —Kelley 1984a: 437 [checklist]. —Monson and Holzenthal 1993: 442 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Myers et al. 2011: 109 [distribution].

—***berneri*** Etnier, 1965: 142 [type locality: [United States], Minnesota, Lake County, Finland; UMSP; ♂]. —Etnier 1965: 147 [checklist]. —Etnier 1968: 191 [to synonymy].

Distribution. —U.S.A.

rougensis (*Pacificotrichia*) Wells & Johanson, 2015: 63 [type locality: New Caledonia, Province Nord, Plaine des Gaïacs, Rivière Rouge, 14.2 km NW summit of Mt Rouge, 50 m upstream road RT1 Noumea-Koné, 21°31.573'S 164°46.690'E, 23 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

sagittifera (*Holarctotrichia*) Ris, 1897: 421 [type locality: [Switzerland], Hausersee bei Ossingen, Ct. Zürich; depository not designated; ♂]. —Morton 1904: 328

[distribution]. —Mosely 1939b: 287 [♂]. —Kimmins 1943: 155 [distribution]. —Kimmins 1958b: 11 [♀; distribution]. —Nybom 1960: 19 [checklist]. —Spuris 1962: 68 [distribution]. —Spuris 1964: 13 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Andersen 1974: 26 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 59, 60 [atlas; ♂; ♀]. —Kelley 1984a: 438 [checklist]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Spuris 1989: 17 [checklist]. —Mey 1991: 270 [distribution]. —Gullefors 2002: 138 [checklist]. —Malicky 2004a: 71, 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Gullefors 2005a: 118, 119 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Wiggers et al. 2006: 54 [distribution]. —Robert 2007: 83 [checklist]. —Ivanov 2011: 196 [checklist]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Andersen and Hagenlund 2012: 136 [distribution]. —O'Connor 2013: 65 [distribution]. —Barndt 2014: 106 [distribution]. —O'Connor 2015: 28, 103 [distribution]. —Zuyderduyn 2016: 7 [distribution]. —Gullefors 2016: 156 [checklist]. —Wallace 2016: 21, 23, 68 [conservation status]. —O'Connor and O'Connor 2018: 84 [distribution]. —Gullefors 2018: 108 [biology; distribution].
Distribution. —Denmark, England, Finland, Germany, Ireland, Latvia, Netherlands, Norway, Russia, Scotland, Sweden, Switzerland.

santiagensis (*Dactylotrichia*) Flint, 1982a: 46 [type locality: Argentina, Pcia. Buenos Aires, Rio Santiago, Palo Blanco, Berisso; NMNH; ♂]. —Flint 1982b: 43 [distribution]. —Kelley 1984a: 442 [checklist]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 34 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Santos et al. 2009: 37 [checklist]. —Paprocki and França 2014: 53 [checklist]. —Rocha et al. 2018: 152 [checklist].

Distribution. —Argentina, Brazil, Uruguay.

savanniensis (*Oxyethira*) Kelley & Harris, 1983: 184 [type locality: [United States], South Carolina, Aiken County, Savannah River Plant, Upper Three Runs Creek at SRP 8-1; NMNH; ♂]. —Harris et al. 1991: 259 [distribution]. —Pescador et al. 2004: 134 [checklist]. —Harris et al. 2012: 11 [checklist]. —Denson et al. 2016: 6 [distribution].

Distribution. —U.S.A.

scaeodactyla (*Dactylotrichia*) Kelley, 1983: 42 [type locality: Ecuador, Pastaza Prov., Puyo; NMNH; ♂]. —Kelley 1984a: 442 [checklist]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

scopulina (*Mesotrichia*) Flint & Sykora, 2004: 43 [type locality: Dominican Republic, Peravia Province, 3 km SW La Nuez, upper Rio Las Cuevas, 18°40'N, 70°36'W, 1850 m; CMNH; ♂; ♀]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic.

scutica (*Pacificotrichia*) Kelley, 1989: 200 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells 1995: 233 [distribution]. —Wells and Johanson 2015: 70 [♂; distribution]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

sechellensis (unplaced) Malicky, 1993: 19 [type locality: [Seychelles], Mahé, Anse aux Pins; Collection Malicky; ♂]. —Malicky 2013: 214 [♂; checklist]. —Wells and de Moor 2020: 502 [♂; distribution].

Distribution. —Angola, Seychelles.

sencilla (*Tanytrichia*) Holzenthal & Harris, 1992: 165 [type locality: Costa Rica, Alajuela, Río Pizote, 5 km N Dos Ríos, 10.948°N, 85.291°W; NMNH; ♂].

Distribution. —Costa Rica.

septentrionalis (*Tanytrichia*) de Souza & Santos, 2017: 498 [type locality: Brazil, Piauí, Piracuruca, Parque Nacional de Sete Cidades, alojamento, 4°05'57"S, 41°42'34"W, 193 m; CZMA; ♂]. —Rocha et al. 2018: 153 [checklist]. —Moreno et al. 2020: 266 [distribution].

Distribution. —Brazil.

serrata (*Holarctotrichia*) Ross, 1938a: 117 [type locality: [United States], Illinois, Fox Lake, at light in town; INHS; ♂; ♀]. —Ross 1944: 136 [♂; ♀; case; distribution]. —Denning 1947a: 148 [distribution]. —Denning 1947b: 171 [distribution]. —Ross and Spencer 1952: 46 [distribution]. —Morse and Blickle 1953: 72 [distribution]. —Etnier 1965: 148 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Roy and Harper 1979: 152 [distribution]. —Blickle 1979: 54, 91 [checklist; ♂]. —Kelley and Morse 1982: 257, 267 [checklist; ♀]. —Waltz and McCafferty 1983a: 11 [distribution]. —Kelley 1984a: 438 [checklist]. —Harper 1989: 541 [distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Houghton et al. 2011b: 6 [phenology; habitat; distribution]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Blinn and Ruiter 2013: 280 [biology; distribution]. —DeWalt et al. 2016: 52 [distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

setosa (*Oxyethira*) Denning, 1947a: 16 [type locality: [United States], Georgia, Macon; ESUW; ♂]. —Blickle 1979: 54, 91 [checklist; ♂]. —Kelley and Morse 1982: 257 [checklist]. —Harris et al. 1982b: 81 [distribution]. —Kelley 1984a: 438 [checklist]. —Kelley 1986: 777 [taxonomic position]. —Harris et al. 1991: 260 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Pescador et al. 2004: 134 [checklist]. —Harris et al. 2012: 11 [checklist]. —Flint 2014: 90 [distribution]. —Denson et al. 2016: 6 [distribution].

Distribution. —U.S.A.

shumari (*Oxyethira*) Ito & Oláh, 2017: 20 [type locality: [Japan], Hokkaido, Horokanai-cho, Shumarinai, Shumarinai-gawa River, a small tributary, 44°17'56"N, 142°09'31"E, 270 m; CBM-ZI; ♂; ♀].

Distribution. —Japan.

sichuanensis (*Oxyethira*) Yang & Kelley in Yang et al. 1997: 92 [type locality: [China], Sichuan province, Nanpingxian, Jiouzhaigou, Shuzhengqunhai, 2250 m; NAUJ; ♂]. —Yang et al. 2005: 458 [checklist]. —Oláh and Ito 2013: 31 [♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

sida (*Oxyethira*) Blickle & Morse, 1954: 122 [type locality: [United States], Lee, N. H.; INHS; ♂]. —Etnier 1965: 148 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Blickle 1979: 55, 97 [checklist; ♂]. —Roy and Harper 1979: 152 [checklist]. —Marshall and Larson 1982: 31 [distribution]. —Kelley 1984a: 437 [checklist]. —Masteller and Flint 1992: 70 [checklist]. —Monson and Holzenthal 1993: 442 [checklist]. —Huryñ and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Myers et al. 2011: 109 [distribution]. —Houghton et al. 2017: 63 [checklist].

Distribution. —Canada, U.S.A.

sierruca (unplaced) Holzenthal & Harris, 1992: 165 [type locality: Costa Rica, Guanacaste, Quebrada Garcia, 10.6 km ENE Quebrada Grande, 10.862°N, 85.428°W; NMNH; ♂]. —Armitage et al. 2015b: 6 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 284 [distribution].

Distribution. —Costa Rica, Panama.

simanka (unplaced) Oláh & Johanson, 2011: 135 [type locality: Ecuador, Wild Sumaco, near Pacto Sumaco; Collection Oláh; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

simplex (*Oxyethira*) Ris, 1897: 420 [type locality: [Switzerland]; ZMUA; ♂]. —Morton 1899a: 54 [distribution]. —Morton 1899b: 281 [distribution]. —Morton 1904: 328 [distribution]. —Mosely 1939b: 283 [♂]. —Macdonald 1950: 25 [larva]. —Kimmins 1958b: 13 [♀; distribution]. —Nybom 1960: 19 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Solem 1970a: 2 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Wallace et al. 1983: 168 [distribution]. —Malicky 1983b: 58, 60 [atlas; ♂; ♀]. —Kelley 1984a: 437 [checklist]. —Andersen and Tysse 1985: 84 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Spuris 1989: 17 [checklist]. —Andersen et al. 1993b: 3 [distribution]. —Andersen et al. 1993a: 51 [distribution]. —Kahnert 1995: 124 [distribution]. —Maier et al. 1995: 145 [distribution]. —Cianficconi et al. 2002: 146 [distribution]. —Gullefors 2002: 138 [checklist]. —Malicky 2004a: 70, 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Malicky 2005a: 68 [distribution]. —Botosaneanu 2005: 17 [distribution]. —Weinzierl et al. 2005: 48 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Chvojka and Komzák 2006: 358 [distribution]. —Robert 2007: 83 [checklist]. —Gullefors 2008: 64 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Ivanov 2011: 196 [checklist]. —Viidalepp et al. 2011: 195, 196 [distribution]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Andersen and Hagenlund 2012: 136 [distribution]. —Lock et al. 2013: 22 [distribution]. —Chalkley 2014: 13 [distribution]. —O'Connor 2015: 28, 104 [distribution]. —Gullefors 2016: 156 [checklist]. —Wallace 2016: 18, 24 [conservation status]. —Graf et al. 2017: 48 [distribution]. —Valle and Lodovici 2018: 147 [distribution]. —Jacquemin et al. 2019: 99 [distribution; habitat description].

Distribution. —Austria, Belgium, Czech Republic, England, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Russia, Scotland, Sweden, Switzerland.

- simulatrix*** (*Dampftrichia*) Flint, 1968b: 43 [type locality: Jamaica, St. Andrew, Fresh River, Ferry; NMNH; ♂; ♀]. —Flint 1968a: 82 [checklist]. —Kelley 1984a: 439 [checklist]. —Holzenthal 1988: 63 [distribution]. —Holzenthal and Harris 1992: 174 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu and Hyslop 1998: 16 [distribution]. —Maes 1999: 1194 [checklist]. —Botosaneanu 2002b: 88 [checklist]. —Flint and Sykora 2004: 44 [distribution taxonomic remarks]. —Chamorro-Lacayo et al. 2007: 44 [checklist]. —Harris et al. 2012: 11 [♂; distribution]. —Armitage et al. 2015b: 6 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution].
- simulatrix cubana*** Kumanski, 1987: 27 [type locality: Cuba, Province Pinar del Rio, Rio El Ballio, near Isabel Rubio village, or Rio Esmeralda in the vicinity of Viñales; SOFM; ♂; ♀; as *Orthotrichia* sp.]. —Botosaneanu 1991: 130 [distribution; ♀; attributed is undoubtedly *tega*]. —Botosaneanu and Hyslop 1998: 16 [distribution]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Botosaneanu 2002: 88 [checklist]. —Flint and Sykora 2004: 44 [to synonymy]. —Botosaneanu and Thomas 2005: 55 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Pérez-Gelabert 2008: 301 [checklist].
- mirebalina*** Botosaneanu, 1991: 130, part [type locality: Haiti; ♀ allotype, misidentification of *O. simulatrix* sensu Flint and Sykora 2004].
- Distribution.** —Costa Rica, Cuba, Dominican Republic, Guadeloupe, Haiti, Jamaica, Mexico, Nicaragua, Panama, U.S.A.
- singularis*** (*Tanytrichia*) de Souza & Santos, 2017: 500 [type locality: Brazil, Bahia, Barreiras, cachoeira Acaba Vidas, 12°08'00"S, 44°59'00"W [approximate coordinates]; MZUFBA; ♂]. —Rocha et al. 2018: 153 [checklist].
- Distribution.** —Brazil.
- sininsigne*** (*Oxytrichia*) Kelley, 1981: 372 [type locality: [United States], Florida, Clay Co., Keystone Heights; NMNH; ♂; ♀]. —Kelley and Morse 1982: 257, 265 [checklist; ♀]. —Harris et al. 1982a: 512 [distribution]. —Kelley 1984a: 440 [checklist]. —Harris et al. 1991: 261 [distribution]. —Pescador et al. 2004: 134 [checklist]. —Harris et al. 2012: 12 [checklist]. —Denson et al. 2016: 6 [distribution].
- Distribution.** —U.S.A.
- sinistra*** (unplaced) Santos, Henriques-Oliveira, & Nessimian, 2009: 40 [type locality: Brazil, Amazonas, Manaus, Igarapé Arumã, tributary to Rio Cuieiras, 02°30'55.2"S, 60°15'44.4"W; INPA; ♂]. —Paprocki and França 2014: 53 [checklist]. —Rocha et al. 2018: 153 [checklist].
- Distribution.** —Brazil.
- smolpela*** Wells, 1991: 493 [type locality: Papua New Guinea, Central Province, Iomari Creek on Bereina-Port Moresby road, 9°04'S 147°06'E; ANIC; ♂; ♀].
- Distribution.** —Papua New Guinea.
- spicula*** (*Pacificotrichia*) Wells & Johanson, 2015: 72 [type locality: New Caledonia, Province Sud, Rivière des Lacs, 1.1 km NW Lac en Huit, 4.9 km NW summit of Pic du Grand Kaori, 22°15.195'S 166°52.178'E; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].
- Distribution.** —New Caledonia.

spinifera (*Trichoglène*) Wells & Johanson, 2015: 42 [type locality: New Caledonia, small fall ~10 km SW Houailou on Houailou-Bourail road; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

spinosella (*Oxyethira*) McLachlan, 1884: 72 [type locality: [Portugal], Madeira, Ribiera Fria near Faial, “levada” on cliff below Sant’ Anna; NHMUK; ♂]. —Morton 1893: 80 [♂]. —Nybom 1948: 9 [distribution]. —Kimmins 1957a: 108 [lectotype designation]. —Nybom 1965: 90 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 59 [atlas; ♂]. —Kelley 1984b: 188 [♂, ♀]. —Kelley 1984a: 437 [checklist]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Botosaneanu 1993b: 160 [distribution; ♀]. —Malicky 2004a: 71 [atlas]. —Malicky 2005b: 547 [checklist]. —Hughes 2006: 29 [biology].

—*fischeri* Higler, 1974: 62 [type locality: Madeira, Rio de Faial, 2 km W of Porto da Cruz; RMNH; ♂]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Botosaneanu 1981b: 186 [♂; distribution]. —Kelley 1984b: 188 [to synonymy]. —Kelley 1984a: 437 [to synonymy].

—*gomera* Kelley, 1984b: 187 [type locality: Canary Islands, Gomera, Chejelipes; ZMUA; ♂]. —Botosaneanu 2003: 107 [to synonymy].

Distribution. —Portugal, Spain.

spirogyrae (unplaced) Müller, 1879b: 48 [type locality: Brazil, Santa Catarina; no type nor type depository designated; case; larva; in *Lagenopsyche*; ♂]. —Müller 1879b: 339 [to *Oxyethira*]. —Ulmer 1957: 172 [bibliography]. —Kelley 1984a: 442 [checklist]. —Angrisano 1999: 35 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Santos et al. 2009: 37 [checklist]. —Paprocki and França 2014: 53 [checklist]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

spissa (unplaced) Kelley, 1983: 48 [type locality: Brazil, Pará State, Rio Cururu, area of Missao Cururu; NMNH; ♂]. —Kelley 1984a: 442 [checklist]. —Angrisano 1999: 35 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Santos et al. 2009: 37 [checklist]. —Paprocki and França 2014: 53 [checklist]. —Rocha et al. 2018: 152 [checklist]. —Moreno et al. 2020: 266 [distribution].

Distribution. —Brazil.

tamandua (unplaced) Angrisano & Sganga, 2009: 65 [type locality: Argentina, Misiones, Parque Provincial Salto Encantado; MACN; ♂].

Distribution. —Argentina.

tamperensis (*Oxyethira*) Malicky, 1999d: 44 [type locality: Finland, Tampere; Collection Malicky; ♂]. —Malicky 2004a: 72 [atlas]. —Malicky 2005b: 547 [checklist]. —Tobias et al. 2009: 25 [♀]. —Salokannel et al. 2012: 202 [confirmed as distinct species].

Distribution. —Finland.

tasmaniensis (*Trichoglène*) Wells, 1998: 83 [type locality: Australia, Tasmanian World Heritage Area, Southwest National Park, Melaleuca, 43°25'10"S 146°08'46"E; ANIC; ♂]. —Neboiss 2002: 54 [checklist]. —Wells 2002b: 40 [distribution].

Distribution. —Australia.

ttega antillularum (*Dampfitrichia*) Botosaneanu, 1994a: 41 [type locality: Guadeloupe, rivière St-Louis dans les Hauts du Matouba; ZMUA; ♂]. —Flint and Sykora 1993: 57 [distribution, as *ttega*]. —Botosaneanu 2002b: 88 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Dominica, Guadeloupe.

ttega ttega (*Dampfitrichia*) Flint, 1968b: 44 [type locality: Jamaica, Trelawny, Martha Brae, near Falmouth; NMNH; ♂; ♀]. —Flint 1968a: 56 [distribution]. —Botosaneanu 1977: 273 [variability; distribution]. —Botosaneanu 1979: 50 [distribution]. —Malicky 1983c: 264 [distribution]. —Kelley 1984a: 440 [checklist]. —Flint 1996a: 16 [checklist]. —Botosaneanu and Hyslop 1998: 16 [distribution]. —Botosaneanu 2002b: 88 [checklist]. —Flint and Sykora 2004: 45 [distribution; taxonomic remarks]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Cuba, Jamaica, Dominica, Haiti, Hispaniola.

teixeirai (*Tanytrichia*) Harris & Davenport, 1992: 470 [type locality: Peru, Loreto, small tributary to the Rio Sucusari at Explornapo Camp; NMNH; ♂].

Distribution. —Peru.

tenei (unplaced) Gibon, Guenda, & Coulibaly, 1994: 111 [type locality: Burkina Faso, sur le Téné (bassin du Sénégal, Fouta-Djalon, Guinée; MNHN; ♂].

Distribution. —Guinea.

tenuella (*Oxyethira*) Martynov, 1924: 54 [type locality: [Russia]; depository not designated; ♂]. —Martynov 1934: 1450 [♂]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 59 [atlas; ♂]. —Kelley 1984a: 437 [checklist]. —Spuris 1989: 17 [checklist]. —Malicky 2004a: 71 [atlas]. —Malicky 2005b: 547 [checklist]. —Ivanov 2011: 196 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Salokannel and Mattila 2018: 362 [♀].

Distribution. —Estonia, Russia.

tica (*Loxotrichia*) Holzenthal & Harris, 1992: 168 [type locality: Costa Rica, Guanacaste, Parque Nacional Santa Rosa, Quebrada El Duende near La Casona, 10.838°N, 85.614°W; NMNH; ♂; ♀]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Botosaneanu and Alkins-Koo 1993: 27 [♂; distribution]. —Botosaneanu 1994a: 43 [distribution]. —Flint 1996b: 98 [distribution]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 88 [checklist]. —Blahnik Paprocki and Holzenthal 2004: 5 [distribution]. —Paprocki et al. 2004: 12 [checklist]. —Botosaneanu and Thomas 2005: 44 [distribution]. —Chamorro-Lacayo et al. 2007: 44 [checklist]. —Dumas et al. 2009: 366 [♂; distribution]. —Santos et al. 2009: 43 [distribution]. Oláh and Johanson 2011: 137 [distribution]. —Dumas and Nessimian 2012: 15 [checklist]. —Paprocki and França 2014: 53 [checklist]. —Armitage et al. 2015a: 7 [checklist]. —de Souza and Santos 2017: 504 [distribution]. —Ríos-Touma et al. 2017: 11 [checklist]. —Rocha et al. 2018: 153 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution]. —Moreno et al. 2020: 266 [distribution].

Distribution. —Brazil, Costa Rica, Dominica, Ecuador, French Guiana, Grenada, Guadeloupe, Honduras, Martinique, Mexico, Nicaragua, Panama, St. Lucia, St. Vincent, Trinidad, Venezuela.

tiwaka (*Trichoglène*) Wells & Johanson, 2015: 44 [type locality: New Caledonia, Province Nord, Bouérabate Stream, S Mont Ninndo, along road Barabache-Boulagoma, 20°17.409'S 164°11.242'E, 60 m; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

tiunovae (*Oxyethira*) Arefina & Armitage, 2003: 16 [type locality: [Russia] Khabarovsk Territory, Ussuri River Basin, Kiya River at Ekaterinoslavka Village; IBSS-RAS; ♂; ♀]. —Ivanov 2011: 196 [checklist]. —Oláh and Ito 2013: 40 [♂; distribution].

Distribution. —Russia.

torquata (*Trichoglène*) Wells, 2002b: 39 [type locality: Australia, Tasmania, McPartlan Pass, Site 8A; ANIC; ♂]. —Neboiss 2002: 54 [checklist].

Distribution. —Australia.

torresiana (*Dampftrichia*) Wells & Dostine, 2016: 594 [type locality: [Australia] North East Queensland, Sesia via Bamaga; ANIC; ♂].

Distribution. —Australia.

torza (unplaced) Oláh & Johanson, 2011: 137 [type locality: French Guiana, Roura, Cacao, 4°33.639'N 52°24.629'W, 66 m; NHRS; ♂].

Distribution. —French Guiana.

touba (*Dampftrichia*) Gibon, 1987a: 123 [type locality: sur le Nzo au niveau de la route Man/Danané (bassin du Sassandra, Côte d'Ivoire); MNHN; ♂].

Distribution. —Côte d'Ivoire.

triangulata (*Trichoglène*) Wells, 1981: 108 [type locality: [Australia] Queensland, Crystal Creek, nr turnoff to Mt Spec; NMV; ♂; ♀]. —Kelley 1984a: 436 [checklist]. —Neboiss 1986: 83 [atlas; ♂; ♀]. —Wells and Dostine 2016: 597 [distribution].

Distribution. —Australia.

tristella (*Oxyethira*) Klapálek, 1895: 168 [type locality: [Czech Republic], on the “Zlata Stoka” in Trěbon, Bohemia; no depository designated; ♂]. —Klapálek 1897: 11 [larva]. —Morton 1899b: 281 [distribution]. —Morton 1904: 327 [distribution]. —Martynov 1924: 53 [♂]. —Martynov 1934: 153 [♂]. —Mosely 1939b: 283 [♂]. —Kimmins 1958b: 9 [♀; distribution]. —Nybom 1960: 19 [checklist]. —Botosaneanu 1967: 294 [distribution]. —Solem 1970b: 93 [distribution]. —Spuris 1972: 20, 22, 26 [checklist]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 58, 60 [atlas; ♂; ♀]. —Kelley 1984a: 437 [checklist]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Tysse 1985: 84 [distribution; as *trictella*]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Spuris 1989: 17 [checklist]. —Andersen et al. 1993a: 51 [distribution]. —Dorn et al. 1993: 259 [distribution]. —Nógrádi 1994: 271 [distribution; ♂; ♀]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Uherkovich and Nógrádi 2001: 95 [distribution].

—Nógrádi 2001: 85 [distribution]. —Wiberg-Larsen and Czachorowski 2002: 151 [distribution]. —Gullefors 2002: 138 [checklist]. —Cibaitė 2003a: 10 [checklist]. —Gullefors 2003: 194 [distribution]. —Malicky 2004a: 70, 72 [atlas]. —Graf and Hutter 2004: 147 [distribution]. —Hohmann 2005: 106 [checklist]. —Mey 2005b: 119 [distribution]. —Gullefors 2005a: 118 [distribution]. —Gullefors 2005b: 138 [distribution]. —Malicky 2005b: 547 [checklist]. —Graf et al. 2005: 55 [distribution]. —Gullefors 2006: 137 [distribution]. —Berlin and Thiele 2007: 48, 50 [distribution; checklist]. —Robert 2007: 83 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Višinskienė 2009: 28 [checklist]. —Ivanov 2011: 196 [checklist]. —Viidalepp et al. 2011: 196 [distribution]. —Salokannel et al. 2012: 202 [confirmed as distinct species]. —Hohmann et al. 2014: 85 [distribution]. —O'Connor 2015: 28, 105 [distribution]. —Gullefors 2016: 156 [checklist]. —Küttner et al. 2016: 179 [distribution]. —Wallace 2016: 21, 23, 69 [conservation status]. —Graf et al. 2017: 48 [distribution]. —Komzák and Kroča 2018: 168 [distribution]. —Cerjanec et al. 2020: 13 [distribution].

Distribution. —Austria, Croatia, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Ireland, Norway, Poland, Russia, Scotland, Sweden.

tropis (*Oxyethira*) Yang & Kelley in Yang et al. 1997: 95 [type locality: [China], Sichuan province, Jiangjinxian, Simianshan, Dam of Dahonghai, 1000 m; NAU]; ♂]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

tsuruga (*Oxyethira*) Ito & Oláh, 2017: 19 [type locality: [Japan], Honshu, Fukui, Tsuruga-shi, Ikenokôchi Marsh, 35°40'N, 136°08'E, 300 m; CBM-ZI; ♂; ♀].

Distribution. —Japan.

tuveva (*Tanytrichia*) Oláh & Johanson, 2011: 138 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°32.833'N 52°11.452'W, 77 m; NHRS; ♂].

Distribution. —French Guiana.

ulmeri (*Dampftrichia*) (Mosely, 1937b): 169 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂; in *Dampftrichia*]. —Kelley 1984a: 439 [checklist]. —Bueno-Soria and Flint 1978: 205 [distribution]. —Blickle 1979: 55, 91 [checklist; ♂]. —Kelley and Morse 1982: 257, 267 [checklist; ♀]. —Angrisano 1995a: 510 [distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Angrisano 1999: 34 [distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Rueda Martín 2011: 9 [♂; distribution]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina, Mexico, Uruguay, U.S.A.

una (*Tanytrichia*) de Souza & Santos, 2017: 500 [type locality: Brazil, Bahia, Una, Reserva Biológica de Una riacho de 1ª ordem após a fazenda Piedade, 15°09'36"S, 39°10'31"W; DZRJ; ♂]. —Rocha et al. 2018: 153 [checklist].

Distribution. —Brazil.

unidentata (*Oxyethira*) McLachlan, 1884: 73 [type locality: Portugal, streamlet west of Silves, Algarve; NHMUK; ♂]. —Morton 1893: 80 [♂]. —Kimmins 1957a: 108

- [lectotype designation]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1980a: 16 [checklist]. —Moretti and Cianficconi 1981: 201 [checklist]. —Malicky 1983b: 58 [atlas; ♂]. —Kelley 1984a: 437 [checklist]. —Malicky and Lounaci 1987: 14 [checklist]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —González et al. 1990: 212 [checklist]. —Cianficconi et al. 1999b: 278 [distribution]. —Malicky 2004a: 70 [atlas]. —Malicky 2005b: 547 [checklist]. —Ruiz-García et al. 2006: 77 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —González and Mendéndez 2011: 119 [distribution]. —Martín et al. 2015: 74 [distribution]. —Sekhi et al. 2016: 58 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —Valle and Lodovici 2018: 147 [distribution]. —Mabrouki et al. 2020: 14 [distribution].
- fuentejalona* Schmid, 1952: 656 [type locality: Spain; CNC; ♂]. —Botosaneanu 1967: 294 [as synonym]. —Marshall 1979b: 232 [to synonymy]. —Lonsdale 2020: 34 [holotype depository].
- meridionalis* Jacquemart & Coineau, 1962: 16 [type locality: [France], les Pyrenees orientales, des Albères; depository not designated; ♂; larva]. —Botosaneanu 1967: 294 [as synonym]. —Marshall 1979b: 232 [to synonymy].
- Distribution.** —Algeria, France, Italy, Morocco, Portugal, Spain.
- unispina* (*Oxytrichia*) Flint, 1974b: 67 [type locality: Suriname, Republiek; RMNH; ♂]. —Kelley 1984a: 440 [checklist].
- Distribution.** —Suriname.
- vaina* (unplaced) Harris & Davenport, 1999: 33 [type locality: Peru, Loreto, edge of Rio Sucusari backwater, adjoining Explornapo Camp; NMNH; ♂].
- Distribution.** —Peru.
- vaza* (*Dampftrichia*) Oláh & Johanson, 2011: 140 [type locality: French Guiana, Roura, Cacao, 4°33.639'N 52°24.629'W, 66 m; NHRS; ♂].
- Distribution.** —French Guiana.
- velocipes* (*Argyrobothrus*) (Barnard, 1934): 393 [type locality: [South Africa]; holotype not designated; depository not designated; ♂; ♀; pupa; in *Argyrobothrus*]. —Scott 1963: 476 [distribution; larva; pupa]. —Jacquemart 1963a: 410 [distribution]. —Kelley 1984a: 438 [checklist]. —de Moor 2011: 354 [distribution]. —de Moor and Bellingan 2019: 157 [distribution].
- Distribution.** —South Africa.
- verna* (*Dampftrichia*) Ross, 1938a: 118 [type locality: [United States], Illinois, Spring Grove; INHS; ♂]. —Ross 1944: 139 [♂; distribution]. —Denning 1947a: 17 [distribution; ♀]. —Denning 1947b: 171 [distribution]. —Blickle 1979: 55, 95 [checklist; ♂]. —Kelley and Morse 1982: 257, 266 [checklist; ♀]. —Harris et al. 1982a: 512 [distribution]. —Kelley 1984a: 440 [checklist]. —Harris et al. 1991: 262 [distribution]. —Monson and Holzenthal 1993: 442 [distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 134 [distribution]. —Harris et al. 2012: 12 [distribution]. —Houghton et al. 2017: 63 [checklist].
- Distribution.** —U.S.A.

***vipera* (*Oxytrichia*)** Kelley, 1983: 50 [type locality: Chile, Valdavia Prov., S of Valdavia; NMNH; ♂]. —Kelley 1984a: 440 [checklist]. —Angrisano 1999: 34 [checklist]. —Oláh and Johanson 2011: 141 [distribution].

Distribution. —Chile.

***volSELLa* (*Oxyethira*)** Yang & Kelley in Yang et al. 1997: 97 [type locality: [China], SFujian Province, Conganshi, 29 km north of Congan, at 408 km marker; NAU; ♂]. —Yang et al. 2005: 458 [checklist]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

***waipoua* (*Trichoglène*)** Wise, 1998: 18 [type locality: [New Zealand], Waipoua Forest, Waipoua R. bridge, swept at edge of river, ca. 100 m, O06 624 164; AMNZ; ♂; ♀]. —Ward and Henderson 2004: 10 [checklist].

Distribution. —New Zealand.

***warramunga* (*Dampfitrachia*)** Wells, 1985a: 99 [type locality: Australia, Northern Territory, Georgetown Billabong, nr Jabiru; NTM; ♂; ♀]. —Neboiss 1986: 82 [atlas; ♂; ♀]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

***zeronia* (*Argyrobothrus*)** Ross, 1941b: 15 [type locality: [United States], Twin Lake, Houghton Co., Michigan; INHS; ♂]. —Ross 1944: 139 [♂; distribution]. —Morse and Bickle 1953: 72 [checklist]. —Etnier 1968: 191 [distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Bickle 1979: 55, 93 [checklist; ♂]. —Roy and Harper 1979: 152 [checklist]. —Parker and Voshell 1981: 4 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Kelley and Morse 1982: 257, 266 [checklist; ♀]. —Harris et al. 1982a: 512 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Hamilton et al. 1983: 19 [distribution]. —Kelley 1984a: 438 [checklist]. —Harris et al. 1984: 109 [distribution]. —Harper 1989: 541 [distribution]. —Morse et al. 1989: 24 [distribution]. —Bowles and Mathis 1989: 240 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Harris et al. 1991: 263 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Monson and Holzenthal 1993: 442 [checklist]. —Moulton and Stewart 1996: 129 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 351 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 134 [checklist]. —Zeullig et al. 2006: 43 [distribution]. —Etnier 2010: 486 [distribution]. —Biondi 2010: 61 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2011b: 6 [phenology habitat]. —Myers et al. 2011: 109 [distribution]. —Harris et al. 2012: 12 [checklist]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Denson et al. 2016: 6 [distribution]. —Houghton 2016: 46 [biology]. —Hunt 2017: 108 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

—***walteri*** Denning, 1947a: 17 [type locality: [United States], Florida, Miami; ESUW; ♂]. —Bickle 1979: 55 [to synonymy].

Distribution. —Canada, U.S.A.

zilaba (*Loxotrichia*) (Mosely), 1939a: 238 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂ in *Loxotrichia*]. —Kelley 1984a: 442 [checklist]. —Angrisano 1995a: 510 [distribution]. —Angrisano 1999: 34 [checklist]. —Blahnik et al. 2004: 5 [distribution]. —Paprocki et al. 2004: 12 [checklist]. —Angrisano and Sganga 2007: 36 [♂; distribution]. —Santos et al. 2009: 37 [checklist]. —Calor 2011: 321 [checklist]. —Paprocki and França 2014: 54 [checklist]. —Rocha et al. 2018: 153 [checklist].
Distribution. —Argentina, Brazil, Paraguay, Uruguay.

Genus *Paroxyethira* Mosely, 1924

Paroxyethira Mosely, 1924: 670 [type species: *Paroxyethira hendersoni* Mosely, 1924, subsequent designation by Mosely and Kimmins 1953: 515]. —Leader 1972: 195; 198 [comparison with *Oxyethira albiceps*; key to New Zealand species]. —Marshall 1979b: 208 [generic review]. —Ward and Henderson 2004: 12 [re-diagnosis of male adults]. —Wells and Johanson 2012: 331 [key to New Caledonian species].

Paroxyethira consists of 25 species recorded from New Zealand, New Caledonia, Vanuatu, and Fiji. Marshall (1979b) considered the genus to be closely related to *Xuthotrichia*, based on similarities of the adult head and thorax, the female genitalia, and larval morphology and habits. Generalized figures of *Paroxyethira* larvae were given by Leader (1968), with a more detailed description given later (Leader 1972).

anomala Wells & Johanson, 2012: 340 [type locality: [New Caledonia], Province Sud, Monts Kwa Ne Mwa, on road between Noumea and Yaté, Rivière des Pirogues, 22°11.225'S, 166°43.338'E, 100 m; MNHN; ♂; ♀]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

asymmetrica Wells & Johanson, 2012: 334 [type locality: [New Caledonia], Province Sud, Xwé Premöu Stream, 300 m N bridge over Dathio River at Atè, 6.2 km WNW Thio, 21.58835°S, 166.15117°E, 13 m; MNHN; ♂; ♀]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

atypica Wells & Johanson, 2012: 335 [type locality: [New Caledonia], Province Sud, Mt. Dzumac, source stream of Ouinne River, downstream crosspoint to mountain track, 22°01.997'S, 166°28.486'E, 795 m, over about 30 m waterfall; MNHN; ♂; ♀]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

auldorum Ward & Henderson, 2004: 12 [type locality: [New Zealand], MB Wakamarina River tributary above tunnel, 25633, 58939, 40 m; CMNZ; ♂].

Distribution. —New Zealand.

dumagnes Kelley, 1989: 201 [type locality: New Caledonia, Boulari River; BPBM; ♂]. —Wells 1995: 234 [distribution]. —Oláh and Johanson 2010a: 35 [distribution]. —Wells and Johanson 2012: 333 [♂; ♀]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

dunedensis Ward & Henderson, 2004: 14 [type locality: [New Zealand], CO Rock and Pillar Range, north end, 22877, 55384, 1190 m; CMNZ; ♂].

Distribution. —New Zealand.

dzumac Wells & Johanson, 2012: 337 [type locality: [New Caledonia], Province Sud, Mt. Dzumac, source stream of Ouinne River, downstream crosspoint to mountain track, 22°01.997'S, 166°28.486'E, 795 m, over ca. 30 m waterfall; MNHN; ♂; ♀]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

eatoni Mosely, 1924: 673 [type locality: New Zealand, South Island, Mackenzie County, River Tekapo; NHMUK; ♂; ♀]. —Mosely and Kimmins 1953: 518 [♂]. —Leader 1972: 197 [♀]. —Neboiss 1986: 80 [atlas; ♂; ♀]. —Ward and Henderson 2004: 11 [checklist].

Distribution. —New Zealand.

hamata Wells & Johanson, 2012: 338 [type locality: [New Caledonia], Province Sud, Mt. Dzumac, source stream of Ouinne River, downstream crosspoint to mountain track, 22°01.997'S, 166°28.486'E, 795 m, over about 30 m waterfall; MNHN; ♂]. —Johanson and Wells 2019: 94 [checklist].

Distribution. —New Caledonia.

hendersoni Mosely, 1924: 673 [type locality: New Zealand, South Island; NHMUK; ♂; ♀]. —Mosely and Kimmins 1953: 515 [♂]. —Leader 1970: 122 [larva]. —Leader 1972: 197 [♀; pupal case; larval leg]. —Cowley 1978: 674 [distribution; larva]. —Neboiss 1986: 80 [atlas; ♂; ♀]. —Ward and Henderson 2004: 11 [checklist]. —Oláh and Johanson 2010a: 36 [distribution].

Distribution. —New Zealand.

hintoni Leader, 1972: 194 [type locality: New Zealand, North Island, Taranaki, Mount Egmont, Te Popo Stream; DSIR, transferred to NZAC; ♂; ♀]. —Neboiss 1986: 80 [atlas; ♂; ♀]. —Ward and Henderson 2004: 11 [checklist].

Distribution. —New Zealand.

hughwilsoni Ward & Henderson, 2004: 14 [type locality: [New Zealand], MC Narbey Stream above Otanerito, Hinewai Reserve, 25138, 57047, 40 m; CMNZ; ♂].

Distribution. —New Zealand.

kimminsi Leader, 1972: 191 [type locality: New Zealand, Swanson, near Auckland, Cascades Stream; DSIR, transferred to NZAC; ♂; ♀]. —Towns 1981: 195 [distribution]. —Neboiss 1986: 81 [atlas; ♂; ♀]. —Ward and Henderson 2004: 11 [checklist].

Distribution. —New Zealand.

koegi Wells & Johanson, 2012: 333 [type locality: [New Caledonia], Province Nord, Ponandou Tiôgé River at Kögi, 3.9 km SSW Touho, 20°49.043'S, 165°13.551'E, 25 m; MNHN; ♂]. —Johanson and Wells 2019: 94 [checklist].

Distribution. —New Caledonia.

manapouri Ward & Henderson, 2004: 15 [type locality: [New Zealand], FD Wolfe Flat, Turret Range; NZAC; ♂].

Distribution. —New Zealand.

nigrispina Kelley, 1989: 202 [type locality: New Caledonia, Boulari River; BPBM; ♂]. —Wells and Johanson 2012: 340 [♂; distribution]. —Johanson and Wells 2019: 94 [checklist].

Distribution. —New Caledonia.

opposita Wells & Johanson, 2012: 335 [type locality: [New Caledonia], Province Nord, Plaine des Gaïacs, Rivière Rouge, 14.2 km NW summit of Mt. Rouge, 50 m upstream road RT1 Noumea-Koné, 20°31.573'S, 164°46.609'E, 23 m; MNHN; ♂]. —Johanson and Wells 2019: 94 [checklist].

Distribution. —New Caledonia.

pounamu Ward & Henderson, 2004: 15 [type locality: [New Zealand], FD Borland Burn tributary near Borland Lodge, 20855, 54787, 170 m; CMNZ; ♂].

Distribution. —New Zealand.

ramifera Ward & Henderson, 2004: 15 [type locality: [New Zealand], ND Waipoua, Fire Lookout Track, stream, 25614, 66162, 140 m; CMNZ; ♂].

Distribution. —New Zealand.

sarae Ward & Henderson, 2004: 14 [type locality: [New Zealand], BR Sabine River, above gorge, 24853, 59202, 520 m; Collection Henderson; ♂].

Distribution. —New Zealand.

serrata Wells & Johanson, 2012: 339 [type locality: [New Caledonia], Province Nord, Mt. Panié, stream at camp, 20.58167°S, 164.76472°E, 1311 m; MNHN; ♂; ♀]. —Johanson and Wells 2019: 94 [checklist].

Distribution. —New Caledonia.

takitimu Ward & Henderson, 2004: 17 [type locality: [New Zealand], BR Slab Hut Creek access road, swampy areas, 24100, 58940, 190 m; CMNZ; ♂].

Distribution. —New Zealand.

teika Ward & Henderson, 2004: 15 [type locality: [New Zealand], WN Catchpool Campground, 26712, 59823, 50 m; CMNZ; ♂].

Distribution. —New Zealand.

tillyardi Mosely, 1924: 670 [type locality: New Zealand, North Island, Tarawera; DSIR, transferred to NZAC; ♂; ♀]. —Mosely and Kimmins 1953: 518 [♂]. —Leader 1970: 122 [larva]. —Leader 1972: 197 [♀]. —Neboiss 1986: 81 [atlas; ♂; ♀]. —Ward and Henderson 2004: 11 [checklist].

Distribution. —New Zealand.

zoae Ward & Henderson, 2004: 15 [type locality: [New Zealand], TO mount Ruahapu near Tawhai Falls, 27269, 62220, 980 m; Collection Henderson; ♂].

Distribution. —New Zealand.

Genus *Paucicalcaria* Mathis & Bowles, 1989

Paucicalcaria Mathis & Bowles, 1989: 187 [type species: *Paucicalcaria ozarkensis* Mathis & Bowles, 1989, original designation].

The monotypic genus *Paucicalcaria* has been recorded only from Magazine Mountain in Arkansas, USA. Based on similarities of the genitalia and thoracic nota and the lack

of ocelli, Mathis and Bowles (1989) placed it as most closely related to *Hydroptila*. The genus can be distinguished from all other hydroptilids by its unique tarsal formula (0, 1, 2) (Mathis and Bowles 1989). The larval stage is unknown.

ozarkensis Mathis & Bowles, 1989: 188 [type locality: Arkansas, Logan Co., Gutter Rock Creek at low-water bridge on road to Green Bench, 35°11'46"N 93°39'46"W, 396 m; NMNH; ♂]. —Moulton and Stewart 1996: 130 [♂; distribution]. —Etnier 2010: 486 [distribution].

Distribution. —U.S.A.

Genus *Sutheptila* Malicky & Chantaramongkol, 2007

Sutheptila Malicky & Chantaramongkol, 2007: 1024 [type species: *Sutheptila kjaerandseni* Malicky & Chantaramongkol, 2007, original designation.]

The monotypic genus *Sutheptila* is recorded from Thailand. Malicky and Chantaramongkol (2007) placed the genus in Hydroptilinae based on the absence of the transverse suture of the mesoscutellum. They also commented that the general form of the male genitalia is similar to that of *Microptila*, but that the phallus differs noticeably (Malicky and Chantaramongkol 2007). The larval stage is unknown.

kjaerandseni Malicky & Chantaramongkol, 2007: 1024 [type locality: Thailand, Doi Suthep NP, bei Tempel, 18°48'N 98°55'E, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 37 [atlas; ♂].

Distribution. —Thailand.

Genus *Tangatrichia* Wells & Andersen, 1995

Tangatrichia Wells & Andersen, 1995: 161 [type species: *Tangatrichia gracilenta* Wells & Andersen, 1995, original designation].

The monotypic genus *Tangatrichia*, occurring in Tanzania, shares similarities in the wings and form of the male genitalia with members of Stactobiinae (Wells and Andersen 1995). However, it has been placed within Hydroptilinae based on the presence of ocelli and the basic structure of the male genitalia; it shares similarities with both *Hydroptila* and *Jabitrachia* (Wells and Andersen 1995). The larval stage is unknown.

gracilenta Wells & Andersen, 1995: 162 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 5, 1650 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

Genus *Tricholeiochiton* Kloet & Hincks, 1944

Tricholeiochiton Kloet & Hincks, 1944: 97 [type species: *Leiochiton fagesii* Guinard, 1879: 19, monotypic; replacement name for *Leiochiton* Guinard, 1879, preoccupied by *Leiochiton* Curtis, 1831, in Coleoptera]. —Marshall 1979b: 210 [generic review]. —Wells 1982: 252 [revision; key to Australian species]. —Wells 1985b: 18 [larva; pupa; case]. —Wells 1997: 1–28 [checklist; larvae]. —Wells 1998: 81 [distribution]. —Kachalova in Medvedev 1998: 189 [key to the species of the European part of the USSR].

Synagotrichia Ulmer, 1951: 81 [type species: *Synagotrichia fortensis* Ulmer, 1951, original designation and monotypic]. —Marshall 1979b: 210 [to synonymy].

Tricholeiochiton includes ten species occurring in Europe, Southeast Asia, Australia, and South America. The genus is most likely closely related to *Oxyethira*, based on the general form of the larvae and features of the adult head and thorax (Marshall 1979b). The larvae of *T. fagesii* have been described by both Lepneva (1970) and Wells (1985b).

bifurca Wells, 1982: 256 [type locality: Western Australia, Mitchell Plateau, Camp Creek; NMV; ♂; ♀]. —Neboiss 1986: 75 [atlas; ♂; ♀]. —Wells et al. 2019: 33 [detection frequency; as *bifurcata*].

Distribution. —Australia.

edmondsi Wells, 1982: 259 [type locality: Western Australia, Stonewall Creek; NMV; ♂; ♀]. —Neboiss 1986: 74 [atlas; ♂; ♀].

Distribution. —Australia.

fagesii (Guinard), 1879: 19 [type locality: [France], dans les bassins des Prés d'Arènes; depository not designated; ♂; larva; pupal case; in *Leiochiton*]. —McLachlan 1880: 523 [*Hydroptila flabellifera* larvae considered as *Leiochiton fagesii*]. —Lauterborn 1934: 220 [larvae of *Hydroptila flabellifera* re-identified as either *Agraylea pallidula* or *Leiochiton fagesii*]. —Martynov 1934: 153 [♂; in *Oxyethira*]. —Mosely 1939b: 291 [♂]. —Spuris 1962: 66 [distribution]. —Botosaneanu 1967: 294 [distribution]. —Botosaneanu and Malicky 1978: 341 [checklist]. —Wiberg-Larsen 1981: 28 [distribution; larva; larval case]. —Moretti and Cianficconi 1981: 201 [checklist; as *fagesi*]. —Hiilivirta 1982: 154 [distribution]. —Malicky 1983b: 58 [atlas; ♂; ♀; as *fagesi*]. —Wiberg-Larsen 1985: 40 [checklist]. —Brock 1987: 85 [distribution; biology]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —O'Connor and O'Hanrahan 1988: 478 [distribution]. —Spuris 1989: 18 [distribution]. —Chvojka 1996: 131 [distribution]. —Graf et al. 1998: 206 [distribution]. —Varga et al. 1998: 147 [distribution; larva]. —Malicky 1999f: 32 [distribution]. —Gullefors 2002: 133, 138 [redlisted in Sweden; checklist]. —Gullefors 2003: 195 [distribution]. —Malicky 2004a: 70 [atlas]. —Malicky 2005b: 54 [checklist]. —Gullefors 2005b: 138 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Arnold et al. 2005: 141 [distribution]. —Sweeney 2006: 300 [distribution]. —Cianficconi et al. 2007: 569,

- 576 [distribution]. —Gullefors and Johanson 2007: 68 [checklist]. —Robert 2007: 83 [checklist]. —Coppa and Jolivet 2008: 91 [distribution; biology]. —Gullefors 2008: 64 [distribution]. —Ujvárosi et al. 2008: 113 [distribution]. —Schrinkel et al. 2008: 90 [distribution]. —Chvojka and Komzák 2008: 13 [distribution]. —Ivanov 2011: 196 [checklist]. —Viidalepp et al. 2011: 196 [distribution; as *fagesi*]. —O'Connor 2015: 28, 106 [distribution]. —Šidagytė et al. 2016: 79 [distribution; biology]. —Pan'kov and Krashenninnikov 2016: 333 [distribution]. —Sanabria and Tempelman 2016: 14 [distribution; biology]. —Gullefors 2016: 156 [checklist]. —Wallace 2016: 15, 18, 25 [conservation status]. —Graf et al. 2017: 48 [distribution]. —Dzhurtubaev et al. 2017: 58 [distribution]. —O'Connor 2019a: 165 [distribution]. —Labat et al. 2019: 107 [distribution]. —Brophy and O'Connor 2020: 244 [distribution]. —O'Connor 2020: 141 [distribution].
- felina* (Ris, 1897): 422 [type locality: [Switzerland], Katzenssee, aus Material vom Torfstich im Zimmer gezogen; depository not designated; ♂; in *Oxyethira*]. —Mosely 1939b: 291–292 [to synonymy].
- Distribution.** —Austria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Romania, Russia, Sweden, Switzerland, Ukraine.
- fidelis* Wells, 1982: 253 [type locality: north Queensland, Alice River on Hervey Range Road; NMV; ♂; ♀]. —Wells 1985b: 19 [larva; case]. —Neboiss 1986: 74 [atlas; ♂; ♀].
- Distribution.** —Australia.
- fortensis* (Ulmer, 1951): 82 [type locality: [Indonesia], Sumatra, Fort de Kock; ZMUH; ♂; in *Synagotrichia*]. —Wells and Huisman 1992: 108 [♂; distribution]. —Wells and Malicky 1997: 185 [distribution]. —Malicky and Chantaramongkol 2007: 1025 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 38 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Mattern 2015: 502 [distribution].
- lacustris* Kimmins, 1951: 210 [type locality: [Myanmar], S. Shan States, Inle Lake, S. end, 900 m; NHRS; ♂]. —Malicky 2013: 43 [to synonymy]. —Wityi et al. 2015: 47 [checklist].
- Distribution.** —India, Indonesia, Malaysia, Myanmar, Nepal, Thailand, Vietnam.
- jabirella* Wells, 1985a: 99 [type locality: Australia, Northern Territory, Corndorl Billabong, nr Jabiru; NTM; ♂; ♀]. —Neboiss 1986: 74 [atlas; ♂; ♀]. —Wells and Dostine 2016: 599 [distribution]. —Wells et al. 2019: 33 [detection frequency].
- Distribution.** —Australia.
- neotropicalis* Flint, 1991a: 70 [type locality: Brazil, Estado Roraima, Ilha Maraca, Rio Urariocoera; INPA; ♂; ♀]. —Angrisano 1999: 35 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Ribeiro et al. 2009: 34 [list of types]. —Paprocki and França 2014: 55 [checklist].
- Distribution.** —Brazil.
- pennyae* Wells, 1998: 82 [type locality: [Australia] Tasmanian World Heritage Area, Southwest National Park, Melaleuca, 43°31'00"S 146°09'41"E; ANIC; ♂]. —Neboiss 2002: 53 [checklist]. —Wells 2002b: 41 [distribution].
- Distribution.** —Australia.

suwannee Chantaramongkol & Malicky, 1986: 515 [type locality: [Sri Lanka], Western Province, Yakkala, 18 mi NE von Colombo, 30 m; MZLU; ♂].

Distribution. —Sri Lanka.

tridens Wells, 1982: 256 [type locality: Western Australia, Mitchell Plateau; NMV; ♂; ♀]. —Neboiss 1986: 75 [atlas; ♂; ♀].

Distribution. —Australia.

Genus *Ugandatrichia* Mosely, 1939

Ugandatrichia Mosely, 1939d: 36 [type species: *Ugandatrichia minor* Mosely, 1939d, original designation]. —Marshall 1979b: 198 [generic review].

Moselyella Kimmins, 1951: 195 [type species: *Ithytrichia violacea* Morton, 1902, original designation]. —Schmid 1960 [to synonymy].

The genus *Ugandatrichia* consists of 31 relatively large species occurring in Africa and south and Southeast Asia. The genus was synonymized with *Microptila* by Schmid (1960), but later reinstated by Marshall (1979b). Marshall (1979b) considered *Ugandatrichia* to be more closely related to *Agraylea* than *Microptila*, based on similarities of the form of the male genitalia and the thoracic nota. The larvae of *U. rhodesiensis* were described by Scott (1976), with several other species having since been provided (Vaillant 1984; Hsu and Chen 2002; Laudee 2008; Ito and Ohkawa 2012).

acuta Mosely, 1939d: 39 [type locality: Kenya, Chania Falls, nr. Nairobi, 4000 ft.; NHMUK; ♀]. —Kimmins 1959: 56 [distribution]. —Johanson 1992: 119 [checklist]. —Wells and Andersen 1995: 145 [checklist].

Distribution. —Kenya, Uganda

africana (Marlier & Vaillant, 1967): 25 [type locality: [Congo], dans la cascade Kiromera, dans l'Urundi, qui se déverse, vers 1,500 m, dans le Kitenge, affluent de la rivière Ruzizi, territ. Bubanza; depository not designated; ♂; in *Allotrichia*]. —Vaillant 1984: 409 [larva; biology; to *Ugandatrichia*].

Distribution. —Congo.

atakpamensis Gibon, 1987a: 122 [type locality: sur l'Amoutchou au niveau de la route Atakpamé/Kpalimé (bassin du Mono, Togo); MNHN; ♂]. —Gibon et al. 1994: 110 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Burkina Faso, Ghana, Togo.

batanta Oláh in Oláh and Kovács 2018: 179 [type locality: Indonesia, West Papua, Batanta Island, Kalijakut River, S00°52'52.0", E130°38'38.0"; Collection Oláh; ♂].

Distribution. —Indonesia.

cathya Wells, 1991: 507 [type locality: Papua New Guinea, Bougainville Island, Panguna, Konaiano Creek; ANIC; ♂; ♀].

Distribution. —Papua New Guinea.

cyanotrichia (Kimmins, 1951): 198 [type locality: [Myanmar], N.E. Burma, Kambaiti, 6–7000 ft.; NHRS; ♂; ♀; in *Moselyella*]. —Wityi et al. 2015: 47 [checklist].

Distribution. —Myanmar.

dentata Wells & Andersen, 1995: 156 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 8, 1510 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

frigoris Mey, 1998b: 7 [type locality: [Vietnam], Quellbach, et. ca. 1400 m; ZMHB; ♂]. —Mey 2005a: 281 [distribution]. —Armitage et al. 2005: 27 [checklist]. —Malicky 2010a: 36 [atlas; ♂].

Distribution. —Vietnam.

hairanga Oláh, 1989: 274 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; HNHM; ♂; ♀]. —Wells and Huisman 1992: 95 [♂; distribution]. —Armitage et al. 2005: 27 [checklist]. —Laudee 2008: 32 [larva]. —Malicky 2010a: 35 [atlas; ♂]. —Bunlue et al. 2012: 15 [distribution].

Distribution. —Malaysia, Thailand, Vietnam.

honga Oláh, 1989: 275 [type locality: Vietnam, Tamdao, 200 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Laudee 2008: 33 [larva]. —Oláh and Johanson 2010a: 36 [distribution]. —Malicky 2010a: 35 [atlas; ♂]. —Laudee and Prommi 2011: 283 [distribution]. —Bunlue et al. 2012: 15 [distribution]. —Yang et al. 2016: 477 [checklist]. —Malicky et al. 2018: 1323 [distribution]. —Oláh and Kovács 2018: 180 [♂]. —Murray-Stoker et al. 2020: 97 [♂; distribution].

—***navicularis*** Xue & Yang, 1990: 125 [type locality: [China] Bawangling (320 m), Hainan; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Malicky 2013: 43 [to synonymy].

Distribution. —China, Laos, Thailand, Vietnam.

kanikar Malicky & Chantaramongkol, 1991: 81 [type locality: [Indonesia], Sumatra, Huta Padang; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 35 [atlas; ♂].

Distribution. —Indonesia.

kebumen Wells & Malicky, 1997: 181 [type locality: [Indonesia] Central Java, Kebumen near Salatiga; Collection Malicky; ♂]. —Malicky 2010a: 35 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Oláh and Kovács 2018: 180 [♂].

Distribution. —Indonesia.

kerdmuang Malicky & Chantaramongkol, 1991: 81 [type locality: Thailand, Chattrakan; Collection Malicky; ♂]. —Malicky 1999e: 203 [larva; biology]. —Laudee 2004: 21 [larva; biology]. —Laudee 2008: 30 [larva]. —Melnitsky and Malicky 2008: 25 [distribution]. —Malicky 2010a: 34 [atlas; ♂]. —Laudee and Prommi 2011: 283 [distribution]. —Bunlue et al. 2012: 15 [distribution].

Distribution. —Thailand.

kuringhat Malicky & Chantaramongkol, 2007: 1028 [type locality: Nepal, Dakhi Khola bei Kuring Ghat, 27°52'N 84°38'E, 300 m; Collection Malicky; ♂]. —Mattern 2015: 502 [distribution].

Distribution. —Nepal.

lampai Wells & Huisman, 1992: 95 [type locality: East Malaysia, Sarawak, Lambir National Park, E of Miri; NTM; ♂; ♀]. —Malicky 2010a: 36 [atlas; ♂]. —Oláh and Kovács 2018: 180 [♂].

Distribution. —Malaysia.

maliwan Malicky & Chantaramongkol, 1991: 80 [type locality: Thailand, Doi Inthanon, Bang Khun Klang, 1200 m; Collection Malicky; ♂]. —Malicky 1999e: 199 [larva; biology]. —Thani and Chantaramongkol 1999: 411 [distribution; biology]. —Laudee 2008: 30 [larva]. —Oláh and Johanson 2010a: 37 [distribution]. —Malicky 2010a: 35 [atlas; ♂]. —Bunlue et al. 2012: 6 [distribution].

Distribution. —Laos, Thailand.

manensis Gibon, 1987a: 122 [type locality: sur le Ko á Man (bassin du Sassandra, Côte d'Ivoire); MNHN; ♂].

Distribution. —Côte d'Ivoire.

mindanaensis Mey, 1998a: 547 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuganon rang, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

mindoroensis Mey, 1995: 193 [type locality: [Philippines], Mindoro, Paluan, Calawagan-Fluß; Collection Mey; ♂]. —Wells and Mey 2002: 125 [distribution]. —Oláh and Kovács 2018: 180 [♂; as *mindoroensii*].

Distribution. —Philippines.

minor Mosely, 1939d: 36 [type locality: Kenya, Thomson's Falls, N. of Nakuru, 7500 ft.; NHMUK; ♂]. —Kimmins 1959: 56 [distribution]. —Johanson 1992: 119 [checklist]. —Wells and Andersen 1995: 145 [checklist].

Distribution. —Kenya, Uganda.

nakijinensis Ito in Ito and Ohkawa 2012: 49 [type locality: Japan, Okinawa-jima, Nakijin-son, Shigema-gawa, 26°41'N, 127°56'E, 75 m above sea level; CMI-ZI; ♂; ♀; pupa; larva]. —Tanida and Kuranishi 2016: 74 [checklist].

Distribution. —Japan.

nigra Mosely, 1939d: 37 [type locality: [Uganda], Ruwenzori, Namwamba Valley, 6500 ft.; NHMUK; ♂; ♀]. —Kimmins 1959: 51 [distribution]. —Johanson 1992: 119 [checklist]. —Wells and Andersen 1995: 145 [checklist].

Distribution. —Uganda.

nikataruwa (Schmid, 1958b): 43 [type locality: [Sri Lanka], Ceylan, Pooprasie (C. P., 2700 ft) 21-I, petit ruisseau à fond caillouteux, dans les plantations de thé; depository not designated; ♂; in *Moselyella*].

Distribution. —Sri Lanka.

rhodesiensis Hsu & Chen, 2002: 75 [type locality: Rhodesia, Chimanimani National Park, Bundi River, main waterfall (c. 1,580 m); AMGS; ♂; ♀; larva; pupa]. —Oláh and Kovács 2018: 180 [♂].

Distribution. —Zimbabwe.

sanana Oláh, 1989: 276 [type locality: Vietnam, Tamdao, 800 m a.s.l.; HNHN; ♂]. —Armitage et al. 2005: 27 [checklist]. —Malicky 2010a: 36 [atlas; ♂].

—***spinata*** Wells & Dudgeon, 1990: 166 [type locality: Hong Kong, Tai Po Kao Forest stream; NHMUK; ♂; ♀]. —Malicky 2013: 43 [to synonymy]. —Yang et al. 2016: 477 [checklist].

Distribution. —Hong Kong, Vietnam.

shinshiroensis Ito, Nishimoto, & Nishimoto, 2018: 492 [type locality: Japan, Honshu, Aichi, Shinshiro-shi, Toyooka, Ichinose, Ôtsutani-gawa River, near river mouth (34°59'26"N, 137°37'29"E, 129 m above sea level); CBM-ZI; ♂; ♀; pupa; larva].

Distribution. —Japan.

sourya (Schmid, 1960): 86 [type locality: [Pakistan] Himalaya, Surgun; CNC; ♂; in *Microptila*]. —Schmid 1958c: 220 [as new species, *nomen nudum*]. —Marshall 1979b: 199 [to *Ugandatrichia*]. —Oláh and Kovács 2018: 180 [♂]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —Pakistan.

taiwanensis Hsu & Chen, 2002: 75 [type locality: Taiwan, Taichung Co., Shiwn Stream, 700 m; NMNS; ♂; ♀; larva, pupa, case]. —Ito and Ohkawa 2012: 54 [♂; ♀; distribution]. —Malicky 2014a: 1623 [checklist]. —Tanida and Kuranishi 2016: 74 [checklist]. —Yang et al. 2016: 477 [checklist].

Distribution. —Japan, Taiwan.

tanzaniensis Wells & Andersen, 1995: 155 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 7, 1535 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

violacea (Morton), 1902: 283 [type locality: [India], Khasias; no type depository designated; ♂; in *Itthytrichia*]. —Kimmins 1951: 196 [♂; in *Moselyella*].

Distribution. —India.

yameogoi Gibon, 1987a: 122 [type locality: Konsankoro, sur un affluent du Haut-Nilo (bassin du Niger, Guinée); MNHN; ♂]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. — Côte d'Ivoire, Ghana, Guinea, Togo.

Genus *Vietrichia* Oláh, 1989

Vietrichia Oláh, 1989: 272 [type species: *Vietrichia linghia* Oláh, 1989, original designation].

The monotypic genus *Vietrichia* is known only from Vietnam. The genus can be separated from all other hydroptilids by the spur formula (0, 2, 4), the convex, pentagonal mesoscutellum, and the general structure of the male genitalia (Oláh 1989). Using Marshall's (1979b) key to hydroptilids, Oláh (1989) placed the genus in Hydroptilinae, based on the symmetrical male genitalia, the phallus that was not thread-like in appearance, and the absence of a transverse suture on the mesoscutellum. The larval stage is unknown.

linghia Oláh, 1989: 273 [type locality: Vietnam, Hoabinh, 20 km in the direction of Tanlac along the road at a small waterfall; HNHN; ♂; ♀]. —Armitage et al. 2005: 27 [checklist]. —Malicky 2010a: 38 [atlas; ♂].

Distribution. —Vietnam.

Genus *Wlitrichia* Kjærandsen, 1997

Wlitrichia Kjærandsen, 1997: 230 [type species: *Wlitrichia introvertica* Kjærandsen, 1997, original designation].

The monotypic genus *Wlitrichia* has been recorded only from Ghana. Kjærandsen (1997) stated that, in general, *Wlitrichia* is very similar morphologically to *Hydroptila*, but the male genitalia very closely resemble those of the subgenus *Loxotrichia* (*Oxyethira*) and differ distinctly in the structure of the inferior appendages. In the parsimony analysis by Kjærandsen (1997) using morphological characters, *Wlitrichia* grouped with the genera *Hydroptila* and *Paucicalcaria*. The larval stage is unknown.

introvertica Kjærandsen 1997: 232 [type locality: Ghana, Volta Region, Agumatsa waterfalls, Wli, station 3A; ZMUB; ♂; ♀].

Distribution. —Ghana.

Genus *Xuthotrichia* Mosely, 1934

Xuthotrichia Mosely, 1934a: 139 [type species: *Xuthotrichia ochracea* Mosely, 1934a, original designation]. —Marshall 1979b: 209 [generic review]. —Wells 1979b: 312 [generic review]. —Ward and Henderson 2004: 17 [re-diagnosis of male adults].

Xuthotrichia consists of two species, one each in New Zealand and Australia. The characteristic male genitalia are asymmetrical and very complex. The genus may be closely related to *Paroxyethira*, based on features of the adult head and thorax; the two genera together may be allied to *Oxyethira* (Marshall 1979b). The larval stage is unknown.

aotea Ward & Henderson, 2004: 15 [type locality: [New Zealand], BR Lewis Pass, 1.6 km south, MT in snow tussock at beech forest edge, 24602, 58686, 850 m; CMNZ; ♂].

Distribution. —New Zealand.

ochracea Mosely, 1934a: 140 [type locality: [Australia, Queensland] Brisbane; Collection Tillyard (transferred to NHMUK according to Wells 1979b: 312); ♂]. —Mosely and Kimmins 1953: 520 [♂]. —Wells 1979b: 312 [♂; distribution]. —Neboiss 1986: 73 [atlas; ♂].

Distribution. —Australia.

Subfamily LEUCOTRICHIINAE Flint, 1970

Leucotrichiinae Flint, 1970: 2 [type genus: *Leucotrichia* Mosely, 1934a]. —Marshall 1979b: 175 [reviewed as tribe Leucotrichiini]. —Santos et al. 2016a: 1 [revised classification; phylogeny].

Leucotrichiinae consists of 16 genera in two tribes occurring predominantly in Central America and northern South America, with a few species recorded from North America and a few as far south as Chile. Flint (1970) established the subfamily for the genus *Leucotrichia* and several closely related genera. In the original description, Flint stated that there was no single character that defined the group as separate from other hydroptilid adults. However, he did consider the following set of character states to be diagnostic when all present: modified head and antennae, ocelli reduced to two in males, and the presence of a basal costal “pouch” or “bulla” on the male forewing. The basic structure of the male genitalia also proved to be difficult to define clearly and Flint merely noted that the form displayed “something characteristic”. Marshall (1979b) gave a more detailed description, but also noted that, while it may seem to form a distinct unit, the subfamily was very difficult to define. Further, she also stated that the genera are difficult to distinguish. Features used to establish genera have been inconsistent, with some genera originally established and defined based on characteristics of the head, antennae, and wings, while others were based on characteristics of the genitalia (Marshall 1979b). Most recently, Santos et al. (2016a) conducted a phylogenetic analysis of Leucotrichiinae relationships based on both morphological and molecular evidence and proposed several taxonomic changes, including the establishment of the tribe Alisotrichiini.

Leucotrichiinae shares many morphological similarities with members of Stactobiinae, but this observation may indicate convergent evolution and not a shared common ancestry (Marshall 1979b). Bowles et al. (1999) assessed genera of Stactobiinae occurring in the New World and transferred several to Leucotrichiinae based on larval characters which they concluded are derived for Leucotrichiinae. Several genera have been transferred back and forth between Leucotrichiinae and Stactobiinae, indicating that the limits between the subfamilies are poorly defined and in need of further research. Larval descriptions have been published for most genera, excluding *Ascotrichia*, *Betrichia*, and *Costatrichia*.

Tribe ALISOTRICHIINI Santos, Nessimian, & Takiya

Alisotrichiini Santos, Nessimian, & Takiya, 2016: 471 [type genus: *Alisotrichia* Flint, 1964]. —Marshall 1979b: 175 [referred to as the *Alisotrichia* group]. —Oláh and Johanson 2011: 142 [referred to as the *Celaenotrichia* genus cluster].

The tribe Alisotrichiini contains six genera, with type genus *Alisotrichia*. When Flint (1970) first established the subfamily Leucotrichiinae, he considered *Alisotrichia* to be a distinct unit separate from the other included genera. As additional genera were described and considered part of the *Alisotrichia* group, they were at different times

placed in either Leucotrichiinae (Bowles et al. 1999) or Stactobiinae (Harris and Holzenthal 1993). In a summary of generic character states, all six genera were placed in a *Celaenotrichia* genus cluster by Oláh and Johanson (2011), although no statistical analysis was performed or discussed. These genera were recently found to be united in a monophyletic clade within Leucotrichiinae, based on a combined analysis of morphological and molecular data (Santos et al. 2016a). Santos et al. (2016a) also stated that morphological synapomorphies included features found in the male genitalia.

Genus *Alisotrichia* Flint, 1964

Alisotrichia Flint, 1964: 46 [type species: *Alisotrichia hirudopsis* Flint, 1964, original designation]. —Flint 1970: 24 [revision; in Leucotrichiinae]. —Marshall 1979b: 183 [generic review]. —Flint 1991b: 44 [key to Antioquian species]. —Harris and Holzenthal 1993: 155 [phylogeny; placement in Hydroptilinae, Stactobiini]. —Bowles et al. 1999: 51 [immatures; placement in Hydroptilinae, Leucotrichiini]. —Oláh and Johanson 2011: 142 [placement in *Celaenotrichia* genus cluster]. —Santos et al. 2016a: 471 [type genus of tribe Alisotrichiini].

Rioptila Blickle & Denning, 1977: 299 [type species: *Rioptila arizonica* Blickle & Denning, 1977, original designation]. —Harris and Holzenthal 1993: 155 [to synonymy].

The genus *Alisotrichia* contains 62 species, including one fossil species known from Dominican amber. The distribution of the genus extends from the southwestern United States, through Mexico and Central America into Venezuela, and also the Antilles. The genus was first placed in Leucotrichiinae by both Flint (1964) and Marshall (1979b), but later was transferred to Stactobiinae (Harris and Holzenthal 1993) and then returned to Leucotrichiinae (Bowles et al. 1999). Flint (1970) divided *Alisotrichia* into several species groups based on adult features, which Marshall (1979b) claimed were not well defined and declined to discuss further. Harris and Holzenthal (1993) later divided the genus into 8 species groups based on tibial spur formula, antennal structure, and features of the male genitalia. The three basal species groups have since been transferred to genera of their own (*blantoni*, *dominicensis*, and *quemada* to *Mejicanotrichia*, *Cerasmatrichia*, and *Scelobotrichia*, respectively). The mature larva of the type species, *A. hirudopsis*, was first described by Flint (1964) and several additional species have been described since. Larvae of *Alisotrichia* are distinct from all other larvae of Leucotrichiinae in that, instead of building a case during the fifth and final instar, they remain free-living until pupation (Marshall 1979b).

aglae Botosaneanu, 1991: 118 [type locality: Haiti, Département de l'Oest, Ville Bonheur (Ville Saut d'Eau); ZMUA; ♂]. —Botosaneanu 2002b: 81 [checklist]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Flint and Sykora 2004: 26 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic, Haiti.

alayoana Botosaneanu, 1977: 256 [type locality: Cuba, Oriente, Baire, Rio Mogote; NMNH; ♂].—Botosaneanu 1979: 48 [distribution]. —Botosaneanu 1994b: 455 [larva]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 81 [checklist]. —López del Castillo et al. 2004: 229 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

aquaecadentis Botosaneanu, 1991: 116 [type locality: Haiti, Département de Sud, Saut Mathurine, Rivière du Cavaillon; ZMUA; ♂; ♀]. —Botosaneanu 2002b: 81 [checklist]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Flint and Sykora 2004: 27 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic, Haiti.

arcana Botosaneanu, 1991: 124 [type locality: Haiti, Département de Sud, près de Camp Perrin, Résurgence du Moreau; ZMUA; ♂]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Flint and Sykora 2004: 27 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic, Haiti.

argentina Flint, 1968b: 34 [type locality: Jamaica, St. Andrew, Chestervale, Yallahs River; NMNH; ♂; ♀; larva; case]. —Flint 1968a: 81 [checklist]. —Botosaneanu 2002b: 81 [checklist].

Distribution. —Jamaica.

† ***arizela*** Wells & Wichard, 1989: 43 [type locality: Dominican Republic; Collection Wichard; ♂; in amber]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 81 [checklist]. —Wichard 2007: 48 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican amber.

arizonica (Blickle & Denning, 1977): 300 [type locality: [U.S.A.] Oak Creek Canyon, Arizona; CAS; ♂; in *Rioptila*]. —Blickle 1979: 54, 61 [checklist; ♂; as *R. arizonensis*]. —Harris and Holzenthal 1993: 155 [♂, to *Alisotrichia*]. —Moulton et al. 1994: 169 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Bowles et al. 1999: 44 [larva]. —Blinn and Ruiter 2005: 68 [distribution; biology].

Distribution. —U.S.A.

asta Harris & Flint, 2002: 207 [type locality: Panama, Barro Colorado Island, Snyder-Molino trail, marker 3; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Panama.

befoga Oláh & Flint, 2012: 159 [type locality: Peru, Huanuco Province, Tingo Maria, 672 m, premontane rain forest; NMNH; ♂].

Distribution. —Peru.

benji Rueda-Martín, 2011: 2 [type locality: Argentina, Jujuy, A° Yuto, Parque Nacional Calilegua, S23°38'40.2", W64°35'53.7", 505 m; IML; ♂].

Distribution. —Argentina.

bernali Harris & Armitage, 2019: 8 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91543°N and 82.15527°W, 120 m; COZEM; ♂].

Distribution. —Panama.

bisetosa Flint & Sykora, 2004: 27 [type locality: Dominican Republic, Independencia Province, Río Guyabal, 4.5 km N Postrer Río, 18°34.7'N, 71°37.7'W, 150 m; NMNH; ♂]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic.

cacaulandia Harris & Flint, 2002: 200 [type locality: Brazil, Rondonia, creek 8 km S Caculaandia; NMNH; ♂]. —Paprocki et al. 2004: 10 [checklist]. Paprocki and França 2014: 40 [checklist].

Distribution. —Brazil.

cainguas Angrisano & Sganga, 2009: 58 [type locality: [Argentina] Misiones, Parque Provincial Salto Encantado, tributary of Arroyo Cuñá-Pirú; MACN; ♂].

Distribution. —Argentina.

chihuahua Bueno-Soria & Harris, 1993: 54 [type locality: Mexico, Chihuahua, Río Concheno, ruta 16 cerca de Basaseachic; NMNH; ♂; ♀]. —Bueno-Soria et al. 2007: 33 [distribution].

Distribution. —Mexico.

chiquitica Botosaneanu, 1977: 258 [type locality: Cuba, Oriente, Baracoa, Río Jojo; NMNH; ♂; ♀]. —Botosaneanu 1979: 48 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 81 [checklist]. —López del Castillo et al. 2004: 229 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

chorra Flint, 1970: 27 [type locality: Mexico, Chiapas, El Chorreadero, 6.4 mi S. Chiapa de Corzo; NMNH; ♂]. —Bueno-Soria and Flint 1978: 200 [distribution].

Distribution. —Mexico.

cimarrona Botosaneanu, 1977: 254 [type locality: Cuba, Pinar del Río, Soroa, Río Manantiales; NMNH; ♂; ♀]. —Botosaneanu 1979: 48 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

circinata Flint, 1992a: 383 [type locality: Puerto Rico, El Verde Field Station, Quebrada Prieta; NMNH; ♂]. —Botosaneanu 2002b: 82 [checklist].

Distribution. —Puerto Rico.

coclensis Armitage & Harris, 2020a: 3 [type locality: Panama, Coclé Province, Cuenca 105, Omar Torrijos Herrera National Park, Quebrada Corazones, PSPSCB-PNGDOTH-C103-2017-001, 8.6776°N, 80.6001°W, 728 m; COZEM; ♂].

Distribution. —Panama.

cornicula Bueno-Soria & Harris, 1993: 52 [type locality: Mexico, Guerrero, Soyatapec; CNIN; ♂].

Distribution. —Mexico.

cuernita Harris & Flint, 2002: 207 [type locality: Panama, Barro Colorado Island, Snyder-Molino trail, marker 3; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Panama.

cyanolenus Flint, 1996b: 91 [type locality: Trinidad, Blue Basin Waterfall, 10°44'N, 61°32'W; NMNH; ♂]. —Botosaneanu 2002b: 82 [checklist].

Distribution. —Trinidad, Venezuela.

euphrosyne Botosaneanu, 1991: 118 [type locality: Haiti, Département de l'Ouest, Ville Bonheur (Ville Saut d'Eau); ZMUA; ♂]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Flint and Sykora 2004: 27 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic, Haiti.

flintiana Botosaneanu, 1977: 253 [type locality: Cuba, Oriente, Baire, Rio Mogote; NMNH; ♂]. —Botosaneanu 1979: 48 [distribution]. —Kumanski 1987: 15 [♀]. —Botosaneanu 1994b: 455 [larva]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

fundorai (Botosaneanu & Sykora, 1973): 397 [type locality: Cuba, Petit affluent du Rio Caburny, Sierra Escambray, près Topes de Collantes; NMNH; ♂; in *Oxyethira*]. —Botosaneanu 1979: 40 [♂, to *Alisotrichia*]. —Kumanski 1987: 15 [♀]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

gabriel Angrisano & Burgos, 2002: 108 [type locality: Argentina, Misiones, Bernardo de Irigoyen, Cuenca del arroyo Urugua-í, Establecimiento Intercontinental; MACN; ♂].

Distribution. —Argentina.

giampaolina Botosaneanu in Botosaneanu and Hyslop 1998: 10 [type locality: Jamaica, St. Ann, Ocho Rios, Shaw Park Gardens; ZMUA; ♂; ♀]. —Botosaneanu 2002b: 82 [checklist].

Distribution. —Jamaica.

hirudopsis aitija Botosaneanu, 1995a: 22 [type locality: Dominican Republic, Arroyo los Guineos, on road San Francisco de Macoris to Loma; ZMUA; ♂]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Flint and Sykora 2004: 27 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic.

hirudopsis hirudopsis Flint, 1964: 47 [type locality: Puerto Rico, El Yunque, stream crossing road 191 at km 6.4; NMNH; ♂; ♀, larva, pupa, case]. —Flint 1968a: 81 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Santos et al. 2016a: 466 [♂].

Distribution. —Puerto Rico.

hispaniolina Botosaneanu, 1991: 116 [type locality: Haiti, Département de l'Ouest, Rivière Tombe à Mirebalais, ZMUA; ♂; ♀]. —Botosaneanu 1995a: 23

[distribution]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Flint and Sykora 2004: 27 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic, Haiti.

holzenthali Santos, 2011: 60 [type locality: Brazil, Minas Gerais State, Santana do Riacho municipality, Cardeal Mota, Rio Cipó, Cachoeira Grande, 19°20'46.7"S, 43°38'09.7"W; DZRJ; ♂; ♀]. —Paprocki and França 2014: 40 [checklist].

Distribution. —Brazil.

kantala Oláh & Johanson, 2011: 143 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S, 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

kanukua Harris & Flint, 2002: 200 [type locality: Guyana, Kanuku Mountains, Moco River, 3°18.2'N, 59°38.9'W; NMNH; ♂; ♀]. —Oláh and Johanson 2011: 144 [distribution].

Distribution. —French Guiana, Guyana.

kevera Oláh & Johanson, 2011: 144 [type locality: French Guiana, Approuaguekaw, Kaw Mt., 4°33.257'N, 52°11.920'W, 216 m; NHRS; ♂].

Distribution. —French Guiana.

latipalpis Flint, 1991b: 44 [type locality: Colombia, Dpto. Antioquia, Quebrada La Jiménez, Sopretrán; NMNH; ♂]. —Muñoz-Quesada 2000: 277 [checklist].

Distribution. —Colombia.

linterna Harris & Flint, 2002: 198 [type locality: Panama, Barro Colorado Island, Snyder-Molino trail, marker 3; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

lobata Flint, 1968a: 43 [type locality: Dominica, Clarke Hall; NMNH; ♂; ♀]. —Flint 1968a: 81 [checklist]. —Flint and Sykora 1993: 49 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Dominica.

macae Santos, 2011: 65 [type locality: Brazil, Rio de Janeiro State, Macaé Municipality, Rio São Pedro, 22°13'47.6"S, 42°08'04.7"W, 470 m; DZRJ; ♂]. —Paprocki and França 2014: 40 [checklist].

Distribution. —Brazil.

mathisi Harris & Flint, 2002: 202 [type locality: Jamaica, St. Andrew, Mavis Bank (1.7 km E), Yallahs River, 18°2.4'N, 77°39.5'W, 575 m; NMNH; ♂; ♀].

Distribution. —Jamaica.

muellita Harris & Flint, 2002: 197 [type locality: Peru, Madre de Dios, Manu, Pakitza, 11°56'S, 71°18'W, 250 m; NMNH; ♂].

Distribution. —Peru.

neblina Harris & Flint, 2002: 205 [type locality: Venezuela, Territorio Federal Amazonas, Cerro de la Neblina, basecamp, 0°50'N, 66°10'W, 140 m; NMNH; ♂; ♀].

Distribution. —Venezuela.

nessimiani Santos, 2011: 66 [type locality: Brazil, Rio de Janeiro State, Nova Friburgo municipality, Cascata, tributary to Rio Macaé, 22°21'54.9"S, 42°15'20.5"W, 391 m; DZRJ; ♂; ♀]. —Paprocki and França 2014: 41 [checklist].

Distribution. —Brazil.

orophila guadeloupea Botosaneanu, 1994a: 35 [type locality: [Guadeloupe] rivière du Grand Carbet, dans son cours supérieur, 3° chute du Carbet; ZMUA; ♂]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 82 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Guadeloupe.

orophila orophila Flint, 1968a: 41 [type locality: Dominica, D'leau Gommier; NMNH; ♂; larva; pupa; case]. —Flint 1968a: 81 [checklist]. —Botosaneanu 1989: 97 [distribution]. —Botosaneanu 1990b: 44 [distribution]. —Flint and Sykora 1993: 49 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Botosaneanu and Thomas 2005: 37 [distribution].

Distribution. —Dominica, Martinique.

panamensis Harris & Flint, 2002: 195 [type locality: Panama, Barro Colorado Island, Canal Zone; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Panama.

paxilla Harris & Flint, 2002: 204 [type locality: Jamaica, St. Elizabeth, Elim, 18°7.1'N, 77°40.5'W; NMNH; ♂].

Distribution. —Jamaica.

rugoka Oláh & Johanson, 2011: 146 [type locality: French Guiana, Approuaguekaw, Kaw Mt., 4°33.035'N, 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

schmidi Kumanski, 1987: 16 [type locality: Cuba, Province Las Villas, massive of Guamuaya, Rio Nabujina, near El Piojillo village; SOFM; ♂; ♀]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

setigera Flint, 1992a: 383 [type locality: Puerto Rico, El Verde Field Station, Quebrada Prieta; NMNH; ♂]. —Botosaneanu 2002b: 82 [checklist].

Distribution. —Puerto Rico.

sonora Bueno-Soria & Harris, 1993: 51 [type locality: Mexico, Sonora, Maycoba River, west of Maycoba; NMNH; ♂]. —Bueno-Soria et al. 2007: 33 [distribution].

Distribution. —Mexico.

tenuivirga Botosaneanu in Botosaneanu and Hyslop 1998: 10 [type locality: Jamaica, Buff Bay River in Green Hill at “Regele”, Blue Mountains, Portland; ZMUA; ♂]. —Botosaneanu 2002b: 82 [checklist].

Distribution. —Jamaica.

tetraespinosa Bueno-Soria & Harris, 1993: 53 [type locality: Mexico, Guerrero, ruta 130, 80 km N. Zihuatanejo; CNIN; ♂].

Distribution. —Mexico.

thalia Botosaneanu, 1991: 120 [type locality: Haiti, Département de l'Ouest, Ville Bonheur (Ville Saut d'Eau); ZMUA; ♂]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Flint and Sykora 2004: 29 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic, Haiti.

timouchela Botosaneanu, 1989: 98 [type locality: Martinique, Rivière Coco (Morne-Vert); ZMUA; ♂; p. 96; ♀; as *Bredinia* sp.]. —Botosaneanu 1990b: 44 [larva; pupa; case; synonymy of *Bredinia* sp.; distribution]. —Flint and Sykora 1993: 49 [checklist]. —Botosaneanu, 2002b: 82 [checklist]. —Harris and Flint 2002: 210 [distribution].

Distribution. —Martinique, St. Vincent, Venezuela.

tiza Harris & Holzenthal, 1993: 157 [type locality: Costa Rica, Guanacaste, Río Tizate, 7.2 km NE Cañas Dulces; NMNH; ♂].

Distribution. —Costa Rica.

ubatuba Santos, 2011: 62 [type locality: Brazil, São Paulo State, Ubatuba municipality, Rio Canoas, 23°20'18.7"S, 44°50'16.8"W, 475 m; DZRJ; ♂; ♀]. —Paprocki and França 2014: 41 [checklist].

Distribution. —Brazil.

ultima Flint & Sykora, 2004: 29 [type locality: Dominican Republic, Azua Province, Río Las Cuevas, 8 km NE Padre Las Casas, 18°46'N, 70°53'W, 580 m; CMNH; ♂]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic.

ventricosa Flint, 1991b: 44 [type locality: Colombia, Dpto. Antioquia, Quebrada La Jiménez, Sopretrán; NMNH; ♂]. —Muñoz-Quesada 2000: 277 [checklist].

Distribution. —Colombia.

viuda Harris & Flint, 2002: 205 [type locality: Venezuela, Sucre, Parque Nacional Península de Paria, Uquire, Rio La Viuda, 10°42.83'N, 61°57.66'W, 15 m; NMNH; ♂].

Distribution. —Venezuela.

woldai Harris & Flint, 2002: 198 [type locality: Panama, Barro Colorado Island, Snyder-Molino trail, marker 3; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

woodruffi Flint & Sykora, 2004: 29 [type locality: Dominican Republic, Monseñor Nouel Province [not La Vega as labelled], 6 km [not mi. as labelled] NW Rt.1 on road to Constanza; FSCA; ♂]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic.

Genus *Byrsopteryx* Flint, 1981

Byrsopteryx Flint, 1981: 27 [type species: *Byrsopteryx mirifica* Flint, 1981, original designation]. —Harris and Holzenthal 1994: 154 [revision; transferred to Stactobiini]. —Bowles et al. 1999: 45 [returned to Leucotrichiini]. —Botosaneanu 2000: 252 [larva; case]. —Oláh and Johanson 2011: 142 [placement in *Celaenotrichia* genus cluster]. —Santos et al. 2016a: 471 [phylogenetic placement]. —Vázquez-Ramos et al. 2020: 487 [larva].

Byrsopteryx consists of 16 species occurring in southern North America, Central America, South America, and the Lesser Antilles. In the original description, Flint (1981) stated that the general appearance and behavior of living *Byrsopteryx* adults was very similar to adults of *Alisotrichia* and that the two genera were probably very closely related, despite the larval body form differing greatly between the two. Flint (1981) assigned *Byrsopteryx* to Leucotrichiinae based on the basic larval and adult morphology, despite the portable larval case. He stated that the genus did not fit well in the subfamily. *Byrsopteryx* was later transferred to Stactobiinae (Harris and Holzenthal 1994) and subsequently returned to Leucotrichiinae (Bowles et al. 1999). A description of the larva of *B. mirifica* was provided by Holzenthal and Harris (1992).

abrelata Harris & Holzenthal, 1994: 157 [type locality: Brazil, Rio de Janeiro, Nova Friburgo, municipal water supply; MZUSP; ♂; ♀]. —Blahnik et al. 2004: 4 [distribution]. —Paprocki et al. 2004: 11 [checklist]. —Dumas et al. 2009: 366 [distribution]. —Santos and Nessimian 2010a: 52 [larva; pupa; case]. —Dumas and Nessimian 2012: 15 [checklist]. —Paprocki and França 2014: 42 [checklist]. —Santos et al. 2016a: 465 [adult photograph].

Distribution. —Brazil.

bipartiterga Botosaneanu, 2000: 252 [type locality: Guadeloupe, La Deuxième Chute de Carbet, formée par la Rivière du Grand Carbet, sur le territoire du Parc National de la Guadeloupe, 580 m; ZMUA; ♀]. —Botosaneanu 2002b: 82 [checklist].

Distribution. —Guadeloupe.

carioca Santos & Nessimian, 2010a: 45 [type locality: Brazil, Rio de Janeiro State, Rio de Janeiro, Floresta de Tijuca; Parque Nacional da Tijuca, Rio Humaitá, 22°57'30.1"S, 43°17'21.4"W, 475 m; DZRJ; ♂; ♀; larva; pupa; biology]. —Paprocki and França 2014: 42 [checklist]. —Santos et al. 2016a: 466 [♂].

Distribution. —Brazil.

chaconi Harris & Holzenthal, 1994: 160 [type locality: Costa Rica, Puntarenas, roadside seep, route 2, just W km 234, 8.976°N, 83.299°W; NMNH; ♂; ♀].

Distribution. —Costa Rica.

cuchilla Harris & Holzenthal, 1994: 164 [type locality: Costa Rica, Cartago, Chitaria; NMNH; ♂; ♀]. —Armitage et al. 2016: 6 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Costa Rica, Panama.

esparta Harris & Holzenthal, 1994: 163 [type locality: Costa Rica, Puntarenas, 14.1 mi SE Esparta; NMNH; ♂]. —Armitage et al. 2020: 4 [distribution].

Distribution. —Costa Rica, Panama.

espinhosa Harris & Holzenthal, 1994: 164 [type locality: Brazil, Rio de Janeiro, km 17, 18 km S Teresopolis; MZUSP; ♂]. —Paprocki et al. 2004: 11 [checklist]. —Dumas et al. 2009: 366 [distribution]. —Santos and Nessimian 2010a: 52 [♀; larva; pupa; case]. —Paprocki and França 2014: 43 [checklist]. —Santos et al. 2016a: 464 [larva photograph].

Distribution. —Brazil.

gomezi Harris & Holzenthal, 1994: 164 [type locality: Costa Rica, Puntarenas, Río Bellavista, ca. 1.5 km NW las Alturas, 8.951°N, 82.846°W; NMNH; ♂; ♀].

Distribution. —Costa Rica.

loja Harris & Holzenthal, 1994: 167 [type locality: Ecuador, Zamora-Chinchipe, 30 km E Loja; NMNH; ♂; ♀]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

mirifica Flint, 1981: 27 [type locality: Venezuela, Aragua, Maracay, Río Limón, Estación Piscicultura; NMNH; ♂; ♀; larva; case]. —Holzenthal and Harris 1991: 405 [♂; ♀; larva; case]. —Harris and Holzenthal 1994: 170 [♂; ♀].

Distribution. —Venezuela.

rayada Harris & Holzenthal, 1994: 172 [type locality: Ecuador, Cañar, Río Chauchas, 3 km N Zhud; NMNH; ♂; ♀]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

septempunctata (Flint, 1968a): 46 [type locality: Dominica, Pont Casse, 2.2 mi E; NMNH; ♂; in *Alisotrichia*]. —Flint 1981: 27 [to *Byrsoteryx*]. —Flint and Sykora 1993: 49 [checklist]. —Harris and Holzenthal 1994: 172 [♂]. —Botosaneanu 2000: 254 [♂; ♀]. —Botosaneanu 2002b: 82 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Dominica, Guadeloupe.

solisi Harris & Holzenthal, 1994: 175 [type locality: Costa Rica, Puntarenas, Río Singrí, 2 km (air) S Finca Helechales, 9.057°N, 83.082°W; NMNH; ♂; ♀]. —Armitage et al. 2020: 4 [distribution].

Distribution. —Costa Rica, Panama.

tabasquensis Bueno-Soria, Santiago-Fragoso, & Barba-Álvarez, 2001: 146 [type locality: Mexico, Tabasco, Municipio de Huimanguillo, Arroyo Las Flores, Villa de Guadalupe 2ª Sección Los Chimalapas, km 5 Ruta Malpasito-Carlos A. Madrazo, 17°22'05"N, 93°36'25"W; CNIN; ♂]. —Bueno-Soria et al. 2005: 75 [distribution].

Distribution. —Mexico.

tapanti Harris & Holzenthal, 1994: 177 [type locality: Costa Rica, Cartago, Res. Tapantí, Quebrada Palmitos and falls, 9.72°N, 83.78°W; NMNH; ♂; ♀].

Distribution. —Costa Rica.

tica Harris & Holzenthal, 1994: 179 [type locality: Costa Rica, Res. Tapantí, unnamed tributary, ca. 8 km (rd.) S headquarters, 9.72°N, 83.78°W; NMNH; ♂; ♀].

Distribution. —Costa Rica.

Genus *Celaenotrichia* Mosely, 1934

Celaenotrichia Mosely, 1934a: 158 [type species: *Celaenotrichia edwardsi* Mosely, 1934a, original designation]. —Marshall 1979b: 183 [generic review]. —Harris and Flint 1993: 101 [re-description; larva; placement]. —Bowles et al. 1999: 45 [taxonomic position]. —Oláh and Johanson 2011: 142 [placement in *Celaenotrichia* genus cluster]. —Santos et al. 2016a: 471 [phylogenetic placement].

Celaenotrichia is a monotypic genus recorded from Chile and Argentina. The genus was first placed in Leucotrichiinae by Marshall (1979b), transferred to Stactobiinae by Harris and Flint (1993), and then returned to Leucotrichiinae by Bowles et al. (1999). Marshall (1979b) asserted that characteristic features of the genus include the distinct structure of the male genitalia and the unmodified antennae and forewings. Larvae were described by Harris and Flint (1993).

edwardsi Mosely, 1934a: 158 [type locality: Chile, Chiloe Island, Castro; NHMUK; ♂]. —Flint 1974a: 87 [checklist]. —Harris and Flint 1993: 101 [♂; ♀; larva; case; distribution]. —Angrisano 1999: 32 [checklist].

Distribution. —Argentina, Chile.

Genus *Cerasmatrichia* Flint, Harris, & Botosaneanu, 1994

Cerasmatrichia Flint, Harris, & Botosaneanu, 1994: 360 [type species: *Cerasmatrichia trinitatis* Flint, Harris, & Botosaneanu, 1994, original designation]. —Bowles et al. 1999: 46 [taxonomic position]. —Oláh and Johanson 2011: 142 [placement in *Celaenotrichia* genus cluster]. —Santos et al. 2016a: 464 [larva photograph].

Cerasmatrichia consists of ten species distributed in the Neotropical faunal region from Costa Rica south to Peru, east to Trinidad, and throughout the Lesser Antilles. The genus, once included in *Alisotrichia* as the *dominicensis* species group, was originally placed in Stactobiinae but has since been transferred to Leucotrichiinae (Bowles et al. 1999). Flint et al. (1994) mentioned in the original description that the tarsal formula of *Cerasmatrichia* (1, 3, 4) differs from the rest of *Alisotrichia* in that no members of the latter genus bear a fore-tibial spur. The larvae of *C. spinosa* were described by Flint et al. (1994).

adunca (Flint, 1991b): 44 [type locality: Colombia, Dpto. Antioquia, 10 km E Medellín, road to Guarne; NMNH; ♂; in *Alisotrichia*, not *Rioptila* as indicated in Oláh and Johanson 2011: 248]. —Flint et al. 1994: 377 [♂; ♀; to *Cerasmatrichia*]. —Muñoz-Quesada 2000: 277 —Oláh and Johanson 2011: 148 [distribution].

Distribution. —Colombia, Peru.

akanthos Armitage & Harris, 2020a: 3 [type locality: Panama, Coclé Province, Cuenca 134, Omar Torrijos Herrera National Park, Quebrada La Yayas, PSPSCB-PNGDOTH-C134-2017-004, 8.66168°N, 80.5952°W, 602 m; COZEM; ♂].

Distribution. —Panama.

argylensis Flint, Harris, & Botosaneanu, 1994: 370 [type locality: Tobago, St. Paul Parish, Argyle River at Argyle Waterfall; ZMUA; ♂; ♀]. —Botosaneanu 2002b: 82 [checklist].

—Hydroptilid genus, sp. 2: Botosaneanu and Sakal 1992: 201. —Botosaneanu and Alkins-Koo 1993: 14 [distribution]. —Flint et al. 1994: 370 [to synonymy].

Distribution. —Tobago, Trinidad.

blahniki Harris & Armitage, 2019: 8 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91672°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

dominicensis (Flint, 1968a): 44 [type locality: Dominica, 2.2 mi E Pont Casse; NMNH; ♂; in *Alisotrichia*]. —Flint 1968a: 81 [checklist]. —Botosaneanu 1989: 97 [distribution]. —Flint and Sykora 1993: 49 [checklist]. —Flint et al. 1994: 369 [♂; ♀; to *Cerasmatrichia*]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 823 [checklist]. —Botosaneanu and Thomas 2005: 38 [probable; distribution].

—*Ochrotrichia* (O.) species, Flint and Sykora 1993: 58 [misidentification]. —Flint et al. 1994: 369 [to synonymy].

Distribution. —Dominica, Guadeloupe, Martinique.

fulika Oláh & Johanson, 2011: 148 [type locality: French Guiana, Approuaguekaw, Kaw Mt., 4°33.035'N, 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

hidala Oláh & Johanson, 2011: 150 [type locality: Peru, San Martin Prov., creek crossing rd. Tarapoto-Yurimaguas, ca. 30 km (rd.) NE Tarapoto, 6°24.904'S, 76°18.756'W; NHRS; ♂].

Distribution. —Peru.

spinosa Flint, Harris, & Botosaneanu, 1994: 368 [type locality: Venezuela, Edo. Aragua, Rio El Limón, fish hatchery, Maracay; NMNH; ♂; ♀; larva; case]. —Flint 1981: 26 [in part, misidentification of *Alisotrichia wirthi* material from Rio El Limón].

Distribution. —Venezuela.

trinitatis Flint, Harris, & Botosaneanu, 1994: 374 [type locality: Trinidad, St. George County, Northern Range, Maracas Waterfall; ZMUA; ♂; ♀]. —Flint 1996b: 90 [distribution]. —Botosaneanu 2000: 83 [checklist].

—Hydroptilid genus, sp. 1: Botosaneanu and Sakal 1992: 201. —Botosaneanu and Alkins-Koo 1993: 14 [distribution]. —Flint et al. 1994: 374 [to synonymy].

Distribution. —Trinidad, Venezuela.

wirthi (Flint, 1968a): 46 [type locality: Dominica, Fond Figs River; NMNH; ♂; in *Alisotrichia*]. —Flint et al. 1994: 374 [♂; ♀; to *Cerasmatrichia*]. —Botosaneanu 2000: 83 [checklist]. —Botosaneanu and Thomas 2005: 38 [probable; distribution]. —Armitage et al. 2016: 6 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Dominica, Guadeloupe, Martinique [?], Panama, Venezuela.

Genus *Mejicanotrichia* Harris & Holzenthal, 1997

Mejicanotrichia Harris & Holzenthal, 1997: 129 [type species: *Alisotrichia blantoni* Flint, 1970, original designation]. —Bueno-Soria and Barba-Álvarez 1999b: 122 [key to males]. —Bowles et al. 1999: 51 [taxonomic position]. —Oláh and Johanson 2011: 142 [placement in *Celaenotrichia* genus cluster]. —Santos et al. 2016a: 471 [phylogenetic placement].

Mejicanotrichia consists of seven species occurring in the Neotropical faunal region. The genus was once included in *Alisotrichia* as the *blantoni* species group (Harris and Holzenthal 1997). The modified male forewings and features of the male genitalia separate *Mejicanotrichia* from the rest of *Alisotrichia* (Harris and Holzenthal 1997). Wiggins (1977) described the larval stage based on individuals identified as ‘*Alisotrichia* species’, which were later synonymized with *M. estaquilloso* by Harris and Holzenthal (1993).

blantoni (Flint, 1970): 28 [type locality: Mexico, San Luis Potosi, Rancho Quemado, 3.5 mi S Tamazunchale; NMNH; ♂; in *Alisotrichia*]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Harris and Holzenthal 1997: 131 [♂; ♀; re-description; to *Mejicanotrichia*]. —Bowles et al. 1999: 46 [larva].

Distribution. —Mexico.

estaquilloso Harris & Holzenthal, 1997: 135 [type locality: Mexico, Nuevo Leon, Mpio. de Santiago, Cola de Caballo below falls, 3 km SW Cienquilla; NMNH; ♂; ♀]. —Bowles et al. 1999: 47 [larva].

—*Alisotrichia* species, Wiggins 1996: 80 [larva]. —Harris and Holzenthal 1997: 47 [to synonymy].

Distribution. —Mexico.

harrisi Bueno-Soria & Barba-Álvarez, 1999a: 118 [type locality: Mexico, Guerrero, Municipio de Taxco, Teusisapan, Río Temascalapa, 18°25.083'N, 99°41.490'W; CNIN; ♂].

Distribution. —Mexico.

rara Bueno-Soria & Barba-Álvarez, 1999a: 118 [type locality: Mexico, Guerrero, Municipio de Taxco, Teusisapan, Río Temascalapa, 18°25.083'N, 99°41.490'W; CNIN; ♂].

Distribution. —Mexico.

tamaza (Flint, 1970): 28 [type locality: Mexico, Oaxaca, Tamazulapan; NMNH; ♂; in *Alisotrichia*]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Harris and Holzenthal 1997: 133 [♂; ♀; re-description; to *Mejicanotrichia*].

Distribution. —Mexico.

tridentata (Bueno-Soria & Hamilton, 1986): 301 [type locality: Mexico, Chiapas, tributario del Río Teapa, 3 km N Ixhuatan; NMNH; ♂; in *Alisotrichia*]. —Harris and Holzenthal 1997: 134 [♂; ♀; re-description; to *Mejicanotrichia*].

Distribution. —Mexico.

trifida (Flint, 1970): 29 [type locality: Guatemala, Izabal, Las Escobas near Matias de Galvez; NMNH; ♂; in *Alisotrichia*]. —Harris and Holzenthal 1997: 134 [♂; re-description; to *Mejicanotrichia*].

Distribution. —Guatemala.

Genus *Scelobotrichia* Harris & Bueno-Soria, 1993

Scelobotrichia Harris & Bueno-Soria, 1993: 75 [type species: *Scelobotrichia contrerasi* Harris & Bueno-Soria, 1993, original designation]. —Bowles et al. 1999: 47 [larva; taxonomic remarks]. —Oláh and Johanson 2011: 142 [placement in *Celaenotrichia* genus cluster].

The genus *Scelobotrichia* contains three species occurring in Mexico. The genus was once included in *Alisotrichia* as the *quemada* species group (Harris and Bueno-Soria 1993). The enlarged basal antennal segment and the unique lobe on the fore-tibia separate *Scelobotrichia* from the rest of *Alisotrichia* (Harris and Bueno-Soria 1993). It was originally placed in Stactobiinae by Harris and Bueno-Soria (1993) and was then transferred to Leucotrichiinae by Bowles et al. (1999). Descriptions of the larvae of *S. contrerasi* and *S. profunda* were given by Bowles et al. (1999).

contrerasi Harris & Bueno-Soria, 1993: 77 [type locality: Mexico, Nuevo Leon, Municipio de Santiago, roadside waterfall near Cola de Caballo, 3 km SW Cieneguilla; NMNH; ♂; ♀]. —Bowles et al. 1999: 47 [larva].

Distribution. —Mexico.

profunda Harris & Bueno Soria, 1993: 78 [type locality: Mexico, Guerrero, Rio en Barranca, Ruta Taxco-Telolapan; CNIN; ♂; ♀]. —Bowles et al. 1999: 48 [larva].

Distribution. —Mexico.

quemada (Flint, 1970): 28 [type locality: Mexico, San Luis Potosi, Rancho Quemado, Rt. 85, 6 km S Tamazunchale; NMNH; ♂; in *Alisotrichia*]. —Harris and Bueno 1993: 80 [♂, to *Scelobotrichia*].

Distribution. —Mexico.

Tribe LEUCOTRICHIINI Flint, 1970

Leucotrichiini Flint, 1970: 2 [type genus: *Leucotrichia* Mosely, 1934a]. —Marshall 1979b: 175 [referred to as the *Leucotrichia* group]. —Oláh and Johanson 2011: 152 [referred to as the *Leucotrichia* genus cluster]. —Santos et al. 2016a: 472 [resurrection sensu novo; phylogenetic analysis].

Originally established as Leucotrichiinae for five genera (Flint 1970), including the now-excluded *Alisotrichia*, Leucotrichiini sensu novo currently contains ten genera. These genera were placed together in the *Leucotrichia* genus cluster based on a character state assessment with no statistical analysis (Oláh and Johanson 2011), and were recovered with strong support as a monophyletic unit in a phylogenetic analysis performed with both morphological and molecular data (Santos et al. 2016a). Males of these genera all bear a median complex on the phallus that is unique to the group and has been considered a unifying feature. Santos et al. (2016a) also identified several additional synapomorphies, including features found on the larvae, pupae, and both male and female genitalia.

Genus *Acostatrichia* Mosely, 1939

Acostatrichia Mosely, 1939a: 228 [type species: *Acostatrichia plaumanni* Mosely, 1939a, original designation]. —Marshall 1979b: 182 [generic review]. —Angrisano and Sganga 2010: 56 [immatures; biology]. —Oláh and Johanson 2011: 152

[placement in *Leucotrichia* genus cluster]. —Santos et al. 2016a: 458 [phylogeny].
—Santos 2020: 202 [generic review].

Acostatrichia consists of 15 species distributed through much of South America. The larva of *A. simulans* was described by Angrisano and Sganga (2010), however, the female is still unknown. Both Mosely (1939a) and Marshall (1979b) noted that *Acostatrichia* is most similar to the genus *Costatrichia*, differing only in the wing venation and the unmodified antennae.

araca Santos & Pes in Santos 2020: 204 [type locality: Brazil, Amazonas, base Serra do Aracá, Igarapé da Cobra, 00°52'34"N, 63°27'04"W; INPA; ♂].

Distribution. —Brazil.

brevipenis Flint, 1974b: 54 [type locality: Suriname, Lawa River, Anapaike; RMNH; ♂]. —Flint 1991a: 69 [distribution]. —Angrisano 1999: 31 [checklist]. —Oláh and Johanson 2011: 156 [distribution]. —Paprocki and França 2014: 40 [checklist]. —Santos 2020: 213 [♂; distribution].

Distribution. —Brazil, French Guiana, Suriname.

buborektala Oláh & Johanson, 2011: 155 [type locality: Peru, San Martin Prov., Rio Huallaga, at Pumarihri Huallaga Lodge, between Juan Guerra and Chazuta, 14 km (rd.) W Chazuta, 6°36.643'S, 76°12.555'W; NHRS; ♂]. —Oláh and Flint 2012: 143 [distribution]. —Santos 2020: 213 [♂].

Distribution. —Brazil, Peru.

cerna Oláh & Flint, 2012: 143 [type locality: Ecuador, Los Rios Province, Quevedo (56 km North), 250 m, Rio Palenque Biological Station; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist]. —Santos 2020: 219 [♂].

Distribution. —Ecuador.

darda Oláh & Flint, 2012: 145 [type locality: Peru, Cusco Department, Pilcopata, 600 m, premontane moist forest; NMNH; ♂]. —Santos 2020: 221 [♂].

— **hosulaba** Oláh & Flint, 2012: 147 [type locality: Ecuador, Pastaza Province, Puyo (1.5 km South); NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist]. —Santos 2020: 221 [to synonymy].

— **pika** Oláh & Flint, 2012: 151 [type locality: Ecuador, Pichincha Province, Santo Domingo de los Colorados, 14 km East; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist]. —Santos 2020: 221 [to synonymy].

Distribution. —Ecuador, Peru.

digitata Thomson & Holzenthal, 2012: 21 [type locality: Venezuela, Bolívar, E Tumeremo, W Bochínche, Río Botonamo, 07°25.462'N, 61°14.318'W, 150 m; UMSP; ♂]. —Santos 2020: 216 [review].

Distribution. —Venezuela.

elvesta Oláh & Flint, 2012: 16 [type locality: Brazil, Rondonia State, creek, 8 km South Cacauplandia; NMNH; ♂]. —Santos 2020: 205 [review].

Distribution. —Brazil.

fimbriata Flint, 1974b: 53 [type locality: Suriname, Coppename River, Raleigh Falls; RMNH; ♂]. —Santos 2020: 216 [♂].

Distribution. —Suriname.

fluminensis (Santos & Nessimian, 2010b): 840 [type locality: Brazil, Rio de Janeiro, Mangaratiba, Reserva Ecológica Rio das Pedras, 22°59'29.4"S 44°06'02.6"W; DZRJ; ♂; in *Costatrichia*]. —Paprocki and França 2014: 43 [checklist]. —Santos et al. 2016a: 472 [to *Acostatrichia*]. —Santos 2020: 205 [♂; distribution].

Distribution. —Brazil.

kihara Oláh & Flint, 2012: 150 [type locality: Ecuador, Napo Province, Pano, at stream, 580 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist]. —Santos 2020: 223 [♂].

Distribution. —Ecuador, Venezuela.

plaumanni Mosely, 1939a: 228 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂]. —Angrisano 1995a: 505 [distribution]. —Angrisano 1999: 31 [checklist]. —Paprocki et al. 2004: 10 [checklist]. —Manzo et al. 2014: 66 [distribution]. —Paprocki and França 2014: 40 [checklist]. —Santos et al. 2016a: 466 [♂, head]. —Santos 2020: 208 [♂].

Distribution. —Argentina, Brazil, Uruguay.

simulans Mosely, 1939a: 229 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂]. —Angrisano 1995a: 505 [distribution]. —Angrisano 1999: 31 [checklist]. —Paprocki et al. 2004: 10 [checklist]. —Angrisano and Sganga 2010: 56 [distribution; larva, case, pupa]. —Paprocki and França 2014: 40 [checklist]. —Santos 2020: 209 [♂; distribution].

Distribution. —Argentina, Brazil, Uruguay.

spinifera Flint, 1974b: 53 [type locality: Suriname, Nickerie River, Lombok Falls; RMNH; ♂]. —Santos 2020: 210 [review].

Distribution. —Suriname.

tuskera Oláh & Flint, 2012: 157 [type locality: Brazil, São Paulo State, Piracicaba; NMNH; ♂]. —Santos 2020: 217 [♂].

Distribution. —Brazil.

ujasa Oláh & Flint, 2012: 158 [type locality: Ecuador, Pastaza Province, Puyo (27 km North), Estacion Fluviometrica; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist]. —Santos 2020: 225 [♂; distribution].

Distribution. —Ecuador, Peru.

Genus *Anchitrichia* Flint, 1970

Anchitrichia Flint, 1970: 14 [type species: *Anchitrichia spangleri* Flint, 1970, original designation]. —Marshall 1979b: 181 [generic review]. —Pes and Hamada 2004: 31 [new records]. —Oláh and Johanson 2011: 152 [placement in *Leucotrichia* genus cluster].

The eight species currently contained within the genus *Anchitrichia* occur throughout Central America and extend south to Argentina. Marshall (1979b) commented that, while *Anchitrichia* may prove to be synonymous with one or more of the other genera of Leucotrichiinae, the genus may be very closely related to *Zumatrichia*. Members can be

distinguished by several adult morphological features, including the relatively larger body size, the unmodified antennae, and the general form of the male genitalia. The larvae of *A. spangleri* were described by Flint (1970) and those of *A. duplifurcata* by Guahyba (1991).

agaboga Oláh & Flint, 2012: 161 [type locality: Ecuador, Cotopaxi Province, Latacunga, 133 km West, 1080 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

carolae Oláh & Flint, 2012: 163 [type locality: Venezuela, Barinas State, Rio Santo Domingo, Barinas; NMNH; ♂].

Distribution. —Venezuela.

duplifurcata Flint, 1983: 36 [type locality: Paraguay, Dpto. Amambay, 2 km S Cerro Cora; NMNH; ♂]. —Guahyba 1991: 121 [larva; pupa; case]. —Angrisano 1999: 31 [checklist]. —Blahnik et al. 2004: 4 [distribution]. —Paprocki et al. 2004: 10 [checklist]. —Dumas et al. 2009: 365 [distribution]. —Paprocki and França 2014: 41 [checklist]. —Santos et al. 2016a: 464 [larva; pupa].

Distribution. —Brazil, Paraguay.

harrisi Oláh & Flint, 2012: 164 [type locality: Venezuela, Zulia State, El Tucuco, Sierra de Perija, montane forest; NMNH; ♂].

Distribution. —Colombia, Venezuela.

holzenthali Oláh & Flint, 2012: 166 [type locality: Ecuador, Napo Province, Rio Jondachi, 30 km North Tena; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

palmatiloba Flint, 1991b: 38 [type locality: Colombia, Dpto. Antioquia, Río Aurrá, km 50, E San Jerónimo; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [distribution].

Distribution. —Colombia, Ecuador, Venezuela.

spangleri Flint, 1970: 14 [type locality: Mexico, Chiapas, Arriaga; NMNH; ♂; larva; case]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Holzenthala 1988: 60 [distribution]. —Aguila 1992: 537 [distribution]. —Chamorro-Lacayo et al. 2007: 42 [checklist; distribution]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama.

trifurcata Angrisano, 1984: 4 [type locality: Argentina, Salta, Parque Nacional Baritú; MACN; ♂]. —Angrisano 1999: 31 [checklist]. —Oláh and Johanson 2011: 156 [distribution]. —Oláh and Flint 2012: 167 [distribution].

Distribution. —Argentina, Peru.

Genus *Ascotrichia* Flint, 1983

Ascotrichia Flint, 1983: 35 [type species: *Ascotrichia frontalis* Flint, 1983, original designation]. —Oláh and Johanson 2011: 152 [placement in *Leucotrichia* genus cluster]. —Thomson 2019: 7 [generic revision].

Ascotrichia is a small genus of six species occurring in eastern South America. When establishing the genus, Flint (1983) stated that it clearly belongs in Leucotrichiinae

and that it is most closely related to *Peltopsyche*, but could be easily distinguished by differences in the head, antennae, and forewings. The larvae are unknown.

adirecta Thomson, 2019: 9 [type locality: Brazil, Minas Gerais, confluence Rio Peixe & Rio Preto do Itambé, 19°17.525'S, 43°15.547'W, 500 m; MZUSP; ♂].

Distribution. —Brazil.

frontalis Flint, 1983: 36 [type locality: Paraguay, Dpto. Alto Paraná, Salto del Monday, near Puerto Presidente Franco; NMNH; ♂]. —Angrisano 1995a: 505 [distribution]. —Angrisano 1999: 31 [checklist]. —Paprocki et al. 2004: 10 [checklist]. —Dumas et al. 2009: 366 [distribution]. —Oláh and Johanson 2011: 157 [distribution]. —Paprocki and França 2014: 41 [checklist]. —Santos et al. 2016a: 465 [adult photograph]. —Thomson 2019: 8 [♂; distribution].

Distribution. —Brazil, Paraguay, Uruguay.

hystricosa Thomson, 2019: 11 [type locality: Brazil, Minas Gerais, Serra do Cipó, Rio Cipó in Cardeal Mota, 19°21.011'S, 43°38.171'W, 720 m; MZUSP; ♂].

Distribution. —Brazil.

simoma Thomson, 2019: 13 [type locality: Brazil, São Paulo, Estação Biológica Boraceia, Rio Guaratuba, 23°40.039'S, 45°53.759'W, 775 m; MZUSP; ♂].

Distribution. —Brazil.

spangleri Oláh & Flint, 2012: 167 [type locality: Venezuela, Amazonas Federal Territory, Puerto Ayacucho (40 km South), El Tobogan, Cano Coromoto; NMNH; ♂]. —Thomson 2019: 15 [♂].

Distribution. —Venezuela.

surinamensis (Flint, 1974b): 57 [type locality: Suriname, Nickerie River, Blanche Marie; RMNH; ♂; in *Betrichia*]. —Flint 1983: 36 [to *Ascotrichia*]. —Oláh and Johanson 2011: 157 [distribution]. —Thomson 2019: 17 [♂].

Distribution. —French Guiana, Guyana, Suriname.

Genus *Betrichia* Mosely, 1939

Betrichia Mosely, 1939a: 230 [type species: *Betrichia zilbra* Mosely, 1939a, original designation]. —Marshall 1979b: 182 [generic review]. —Oláh and Johanson 2011: 152 [placement in *Leucotrichia* genus cluster]. —Santos et al. 2016a: 472 [phylogenetic position; larva photograph].

Betrichia is a genus consisting of ten species distributed through eastern South America. The larval stages are unknown. As species have been added to *Betrichia*, the characters states originally given to define the genus have proven instead to be specific; there are no precise diagnostic characteristics that can be used to clearly distinguish members of the genus from other genera of Leucotrichiinae (Marshall 1979b).

argentinica Flint, 1972b: 232 [type locality: Argentina, Prov. Misiones, Capióvi; NMNH; ♂]. —Angrisano 1995a: 505 [distribution]. —Angrisano 1999: 32 [checklist]. —Thomson 2012: 2 [checklist].

Distribution. —Argentina, Uruguay.

bispinosa Flint, 1974b: 59 [type locality: Suriname, Lawa River, Anapaike; RMNH; ♂]. —Thomson 2012: 2 [checklist]. —de Souza et al. 2016a: 295 [distribution].

Distribution. —Brazil, Suriname.

kagyla Oláh & Flint, 2012: 170 [type locality: Brazil, Amazonas State, Igarape Tarumanzinho, near Manaus; MZUSP; ♂].

Distribution. —Brazil.

longistyla Flint, 1983: 38 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NMNH; ♂]. —Angrisano 1999: 32 [checklist]. —Paprocki et al. 2004: 10 [checklist]. —Thomson 2012: 2 [checklist]. —Paprocki and França 2014: 42 [checklist].

Distribution. —Brazil.

nhundiaquara de Souza, Santos, & Takiya, 2016a: 291 [type locality: Brazil, Paraná, Morretes, Rio Nhundiaquara, 25°25'25"S 48°54'0"W, 89 m; DZRJ; ♂]. —Moreno et al. 2020: 265 [distribution].

Distribution. —Brazil.

occidentalis Flint, 1974b: 60 [type locality: Suriname, Blanche Marie, falls in creek; RMNH; ♂]. —Oláh and Johanson 2011: 159 [distribution]. —Thomson 2012: 2 [checklist].

Distribution. —French Guiana, Suriname.

rovatka Oláh & Johanson, 2011: 159 [type locality: French Guiana, Roura, Cacao, 4°33.639'N, 52°24.629'W, 66 m; NHRS; ♂]. —Oláh and Flint 2012: 171 [distribution]. —Thomson 2012: 2 [checklist]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador, French Guiana.

uruguayensis Angrisano, 1995a: 505 [type locality: Uruguay, Paysandu, Sta. Rita, Puerto Pepeaji; FHCU; ♂]. —Angrisano 1999: 32 [checklist]. —Thomson 2012: 2 [checklist]. —Oláh and Flint 2012: 171 [distribution].

Distribution. —Brazil, Uruguay.

varratlana Oláh & Flint, 2012: 171 [type locality: Brazil, Rondonia State, creek 8 km South Cacauplandia; NMNH; ♂].

Distribution. —Brazil, Guyana.

zilbra Mosely, 1939a: 231 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK ♂]. —Angrisano 1995a: 505 [distribution]. —Angrisano 1999: 32 [checklist]. —Paprocki et al. 2004: 10 [checklist]. —Oláh and Flint 2012: 173 [distribution]. —Thomson 2012: 2 [checklist]. —Paprocki and França 2014: 42 [checklist]. —de Souza et al. 2016a: 293 [♂; distribution].

Distribution. —Argentina, Brazil, Guyana, Uruguay.

Genus *Ceratotrichia* Flint, 1992

Ceratotrichia Flint, 1992b: 527 [type species: *Ceratotrichia fairchildi* Flint, 1992b, original designation]. —Pes and Hamada 2004: 31 [larva; pupa; taxonomic remarks; distribution]. —Oláh and Johanson 2011: 152 [placement in *Leucotrichia* genus cluster].

The genus *Ceratotrichia* currently contains five species recorded from Panama, northern South America, Bolivia, and Brazil. In the original description, Flint (1992b) stated that *Ceratotrichia* is most closely related to *Zumatrichia*, in that the two genera shared the male reduction of ocelli, a basic wing venation, and the general structure of both male and female genitalia. He also stated that the male secondary sexual modifications are quite different between the two genera: the modifications to the antennae occur on different segments, *Ceratotrichia* lacks the deep indentation on the head present in *Zumatrichia*, and *Zumatrichia* lacks the specialized brushes and patches of hairs present on the forewings of *Ceratotrichia*. The larvae of an unidentified species of *Ceratotrichia* were described by Pes and Hamada (2004).

balra Oláh & Johanson, 2011: 157 [type locality: Bolivia, Hung. Soil. Exp. II, S. Amer. No.B-B: No.493, Alcoche (La Paz), surroundings of Hotel, 600 m; HNHM; ♂].
Distribution. —Bolivia.

fairchildi Flint, 1992b: 528 [type locality: Panama, Comarca of San Blas, Quebrada Pingandi, 9 km N Nusagandi; NMNH; ♂]. —Aguila 1992: 537 [distribution]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

felgorba Oláh & Flint, 2012: 173 [type locality: Ecuador, Napo Province, Pano, at stream, 580 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

flavicoma Flint, 1992b: 529 [type locality: Venezuela, State of Barinas, Puente Parangula, 8 km S Barinitas; NMNH; ♂]. —Flint 1996c: 396 [distribution]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador, Peru, Venezuela.

jobbra Oláh & Flint, 2012: 174 [type locality: Ecuador, Manabi Province, 29 km West Santo Domingo, Rancho Ronald; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

Genus *Costatrichia* Mosely, 1937

Costatrichia Mosely, 1937b: 166 [type species: *Costatrichia lodora* Mosely, 1937b, original designation]. —Flint 1970: 11 [revision]. —Marshall 1979b: 181 [generic review]. —Holzenthal and Harris 1999: 540 [revision; key to species]. —Oláh and Johanson 2011: 152 [placement in *Leucotrichia* genus cluster].

The genus *Costatrichia* consists of 20 species distributed from Mexico through Central America and south to southeastern South America. Flint (1970) separated *Costatrichia* from *Zumatrichia* based on the presence of three ocelli in males and the generally unmodified antennal segments of the former. Marshall (1979b) asserted that it was not possible to define this genus satisfactorily and that some members would key out with other genera. The genus was divided by Holzenthal and Harris (1999) into two species

groups (*simplex* and *lodora*) based on adult features present on the head, wings, and male genitalia. The larval stage is unknown.

bipartita Flint, 1970: 12 [type locality: Nicaragua, Chontales, Puente Quinama, near Villa Somoza; NMNH; ♂]. —Maes and Flint 1988: 4 [distribution]. —Holzenthall and Harris 1999: 564 [♂]. —Maes 1999: 1193 [checklist]. —Chamorro-Lacayo et al. 2007: 42 [checklist].

Distribution. —Nicaragua.

carara Holzenthall & Harris, 1999: 552 [type locality: Costa Rica, San José, Reserva Biológica Carara, Río del Sur, 1.5 km (rd) S Carara, 9.769°N, 84.531°W; NMNH; ♂; ♀].

Distribution. —Costa Rica.

cressae Holzenthall & Harris, 1999: 555 [type locality: Venezuela, Distrito Federal, Río Camuri Grande, 1 km S Camuri (nucleo U.S.B.), 10.616°N, 66.175°W; NMNH; ♂; ♀].

Distribution. —Venezuela.

devestiva Thomson & Armitage, 2018: 2 [type locality: Panama, Chiriquí Province, Cuenca 102 (Río Chiriquí Viejo), Quebrada Norte, Mount Totumas Biological Reserve, 8.873613°N, 82.690512°W; COZEM; ♂].

Distribution. —Panama.

dietrichi Thomson & Armitage, 2018: 3 [type locality: Panama, Chiriquí Province, Cuenca 102 (Río Chiriquí Viejo), Quebrada Norte, Mount Totumas Biological Reserve, 8.873613°N, 82.690512°W; COZEM; ♂]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Panama.

flinti Holzenthall & Harris, 1999: 545 [type locality: Costa Rica, Puntarenas, Río Singrú, ca. 2 km (air) S Finca Helechales, 9.057°N, 83.082°W; NMNH; ♂].

Distribution. —Costa Rica.

hamulifera (Flint, 1983): 38 [type locality: Argentina, Pcia. Entre Rios, Rio Uruguay, Salto Grande; NMNH; ♂; in *Betrichia*]. —Angrisano 1995a: 505 [distribution]. —Angrisano 1999: 32 [checklist]. —Angrisano and Sganga 2007: 30 [♂; distribution]. —Calor 2011: 321 [checklist]. —Oláh and Johanson 2011: 159 [distribution]. —Oláh and Flint 2012: 170 [distribution]. —Thomson 2012: 2 [checklist]. —de Souza et al. 2013: 585 [distribution]. —Paprocki and França 2014: 42 [checklist]. —Santos et al. 2016a: 472 [to *Costatrichia*].

Distribution. —Argentina, Brazil, French Guiana, Paraguay, Uruguay.

inaequalis Gama Neto, Ribeiro, & Passos, 2019: 386 [type locality: Brazil, Pará, Parauapebas municipality, Serra dos Carajás, low order stream, 6°2'24.828"S, 50°17'38.184"W; MPEG; ♂].

Distribution. —Brazil.

ipixuna Santos, Takiya, & Nessimian, 2013: 448 [type locality: Brazil, Amazonas, Ipixuna, Rio Liberdade, Comunidade São Vicente, 07°21'47"S 71°52'07"W, 175 m; INPA; ♂; ♀]. —Paprocki and França 2014: 43 [checklist]. —Santos et al. 2016a: 466 [♂ antennae; ♀].

Distribution. —Brazil.

lodora Mosely, 1937b: 168 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂]. —Flint 1970: 12 [♂; distribution]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Holzenthall 1988: 60 [distribution]. —Holzenthall and Harris 1999: 541 [♂; distribution]. —Bueno-Soria et al. 2005: 75 [checklist]. —Chamorro-Lacayo et al. 2007: 42 [checklist].

Distribution. —Costa Rica, Mexico, Nicaragua.

nelsonferreirai Santos & Nessimian, 2010b: 838 [type locality: Brazil, Pará, Canaã dos Carajás, Floresta Nacional - FLONA - de Carajás, lagoa Redonda, 06°21'20.7"S 50°23'26.7"W, 705 m; DZRJ; ♂; ♀]. —Paprocki and França 2014: 43 [checklist].

—*ketvilla* (Oláh & Flint, 2012): 149 [type locality: Brazil, Pará State, Rio Xingu Camp, circa. 60 km South Altamira, 52°22'W, 3°39'S; MZUSP; ♂; in *Acostatrichia*]. —Santos 2020: 227 [to synonymy].

Distribution. —Brazil.

noite Angrisano, 1995a: 507 [type locality: Uruguay, Tacuarembó, Ao. Laureles, Rincón de la Vasoura; FHCU; ♂]. —Angrisano 1999: 32 [checklist]. —Holzenthall and Harris 1999: 540, 564 [♂; distribution]. —Oláh and Flint 2012: 176 [distribution]. —Santos et al. 2013: 450 [distribution]. —Paprocki and França 2014: 43 [checklist]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Brazil, Ecuador, Paraguay, Peru, Uruguay.

panamensis Flint, 1967b: 11 [type locality: Panama, Canal Zone, Río Agua Salud; NMNH; ♂]. —Flint 1970: 12 [♂]. —Aguila 1992: 538 [distribution]. —Holzenthall and Harris 1999: 568 [♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

rovidka (Oláh & Flint, 2012): 153 [type locality: Guyana, Moco-Moco, 30 km East Lethem, 3°18.2'N, 59°39.0'W; NMNH; ♂; in *Acostatrichia*]. —Santos 2020: 228 [to *Costatrichia*].

Distribution. —Guyana.

santosi Harris & Armitage, 2019: 9 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

simplex Flint, 1970: 13 [type locality: El Salvador, San Salvador, Lake Ilopango, near Apulo; NMNH; ♂]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Holzenthall 1988: 61 [distribution]. —Holzenthall and Harris 1999: 545 [♂; ♀; distribution]. —Chamorro-Lacayo et al. 2007: 42 [checklist].

Distribution. —Costa Rica, El Salvador, Honduras, Mexico, Nicaragua.

spinifera Flint, 1970: 13 [type locality: Panama, Canal Zone, Río Agua Salud, Pipeline Road; NMNH; ♂]. —Aguila 1992: 538 [distribution]. —Holzenthall and Harris 1999: 558 [♂; distribution]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Panama.

tapada (Oláh & Flint, 2012): 154 [type locality: Venezuela, Bolivar State, Rio Caroni at Paso Caruachi; NMNH; ♂; in *Acostatrichia*]. —Santos 2020: 229 [to *Costatrichia*].

Distribution. —Venezuela.

tripartita Flint, 1970: 13 [type locality: Panama, Canal Zone, Río Agua Salud, Pipeline Road; NMNH; ♂]. —Aguila 1992: 538 [distribution]. —Holzenthall and Harris 1999: 549 [♂; ♀; distribution]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Panama.

venezuelensis Flint, 1981: 25 [type locality: Venezuela, Aragua, Maracay Río Limón, Estación Piscicultura; NMNH; ♂; as subspecies of *tripartita*]. —Holzenthall and Harris 1999: 558 [new status; diagnosis; ♂; distribution]. —Oláh and Flint 2012: 176 [distribution]. —Armitage et al. 2016: 6 [distribution].

Distribution. —Costa Rica, Panama, Venezuela.

Genus *Leucotrichia* Mosely, 1934

Leucotrichia Mosely, 1934a: 157 [type species: *Leucotrichia melleopicta* Mosely, 1934a, original designation]. —Ross 1944: 271 [key to males of Nearctic species]. —Flint 1970: 3 [key; revision]. —Marshall 1979b: 178 [revision]. —Blickle 1979: 7 [key to species of America north of Mexico]. —Flint 1991b: 39 [key to Antioquian species]. —Oláh and Johanson 2011: 152 [placement in *Leucotrichia* genus cluster]. —Thomson and Holzenthall 2015: 1 [generic revision; key to males]. —Santos et al. 2016a: 475 [assessment of monophyly].

The genus *Leucotrichia* consists of 46 species, including one fossil species known from Dominican amber. Its distribution includes most of the United States, Central and northern South America, the Greater Antilles, and the southernmost Lesser Antilles. Two main species groups were outlined by Flint (1970) based on adult features including ocelli number, the presence of head modifications, and the presence of a process or brush of setae on abdominal sternite VII. The larva of *L. pictipes* was first described as that of *Ithytrichia confusa*; the larvae and cases for many other species have since been described (Lloyd 1915; Wiggins 1996).

† **adela** Wells & Wichard, 1989: 42 [type locality: Dominican Republic; NMNH; ♂; in amber]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 84 [checklist]. —Wichard 2007: 48 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Pérez-Gelabert 2008: 300 [checklist]. —Thomson and Holzenthall 2015: 9 [♂].

Distribution. —Dominican amber.

alibrachia (Thomson, 2012): 4 [type locality: Brazil, Rio de Janeiro, Resende, Ribeirás do Palmital, 22°25'26.2"S, 44°44'21.6"W, 969 m; DZRJ; ♂; in *Betrichia*]. —Paprocki and Franca 2014: 41 [checklist]. —Santos et al. 2016a: 472 [to *Leucotrichia*].

Distribution. —Brazil.

alisensis Rueda Martín, 2011: 4 [type locality: Argentina, Tucamán, Parque Nacional Campo de Los Alisos, Río de las Pavas, S27°12'39", W65°55'39", 1655 m; IML; ♂; metamorphotype; larva, pupa]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 10 [♂]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina.

angelinae Thomson & Holzenthal, 2015: 11 [type locality: Venezuela, Mérida, Cacuta, 10 km E Tabay; NMNH; ♂].

Distribution. —Venezuela.

ayura Flint, 1991b: 41 [type locality: Colombia, Dpto. Antioquia, 12 km NW Medellín, road to San Pedro; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 11 [♂].

Distribution. —Colombia.

bicornuta Thomson, 2012: 4 [type locality: Brazil, Rio de Janeiro, Panedo, Rio das Pedras, Tres Bacias 22°24'32.2"S, 44°33'06.5"W, 735 m; DZRJ; ♂]. —Paprocki and França 2014: 45 [checklist]. —Thomson and Holzenthal 2015: 12 [♂].

Distribution. —Brazil.

botosaneanui Flint, 1996b: 86 [type locality: Tobago, big waterfall 4 km S Charlotteville, 11°19'N, 60°33'W; NMNH; ♂]. —Botosaneanu and Sakal 1992: 201 [distribution; ecology; as *limpia*]. —Botosaneanu and Alkins-Koo 1993: 10 [larva; as *limpia*]. —Botosaneanu 2002b: 84 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 13 [♂].

Distribution. —Tobago, Trinidad.

brasiliiana Sattler & Sykora, 1977: 239 [type locality: Brazil, Amazonas Staat, bereich des Rio Marauía, bei Tapuruquara, oberer Rio Negro; type depository unknown; ♂; larva; pupa; case]. —Paprocki et al. 2004: 11 [checklist]. —Thomson 2012: 2 [checklist]. —Paprocki and França 2014: 45 [checklist]. —Thomson and Holzenthal 2015: 14 [♂].

Distribution. —Brazil.

brochophora Flint, 1991b: 41 [type locality: Colombia, Dpto. Antioquia, Quebrada Espadera, 7 km E Medellín, road to Sta. Elena; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 15 [♂].

Distribution. —Colombia.

chiriquiensis Flint, 1970: 6 [type locality: Panama, Chiriqui, Also Lino above Bouquet; NMNH; ♂; larva; case]. —Aguila 1992: 538 [distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 16 [♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

denticulata Thomson & Holzenthal, 2015: 17 [type locality: Mexico, Nuevo Leon, Municipio de Santiago, Arroyo San Juan on road to Laguna de Sanchez, 3.5 km W La Cienega, 25°24'N, 100°17'W, 1400 m; UMSP; ♂].

Distribution. —Mexico.

dianeae Thomson & Holzenthal, 2015: 17 [type locality: Costa Rica, Cartago, Reserva Tapantí, waterfall, ca. 1 km (road) NW tunnel, 9.69°N, 83.76°W, 1600 m; UMSP; ♂].

Distribution. —Costa Rica.

dinamica Bueno-Soria, 2010: 23 [type locality: Mexico, Distrito Federal, Delegación Magdalena-Contreras, Parque “Los Dinamos”, 3091 m; CNIN; ♂]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 18 [♂].

Distribution. —Mexico.

extraordinaria Bueno-Soria, Santiago-Fragoso, & Barba Álvarez, 2001: 145 [type locality: Mexico, Tabasco, Municipio de Huimanguillo, Arroyo las Flores, Villa de Guadalupe 2ª sección Los Chimalapas, km 5 Ruta Malpasito-Carlos A. Madrazo, 17°22'05"N, 93°36'25"W; CNIN; ♂]. —Bueno-Soria et al. 2005: 75 [distribution]. —Thomson 2012: 2 [checklist] —Thomson and Holzenthal 2015: 19 [♂]. —Armitage et al. 2018: 5 [distribution]. —Harris and Armitage 2019: 4, 19 [distribution; ♂].

Distribution. —Panama, Mexico.

fairchildi Flint, 1970: 10 [type locality: Panama, Cocle, El Valle; MCZ; ♂]. —Flint 1968b: 38 [♂; ♀; Grenada, but misidentified as *sarita*]. —Flint 1981: 25 [♂; distribution]. —Flint 1991b: 39 [♂; distribution]. —Aguila 1992: 538 [distribution]. —Botosaneanu and Sakal 1992: 201 [distribution; ecology]. —Flint and Sykora 1993: 54 [Grenada but misidentified as *sarita*]. —Botosaneanu and Alkins-Koo 1993: 7 [larva; case]. —Flint 1996b: 86 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Muñoz-Quesada 2000: 278 [checklist]. —Botosaneanu 2002b: 84 [checklist]. —Botosaneanu and Vilorio 2002: 106 [distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 20 [♂]. —Armitage et al. 2015a: 6 [checklist]. —Ríos-Touma et al. 2017: 10 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

—Leucotrichiini, case 2 Botosaneanu and Alkins-Koo, 1993: 14 [♀]. —Flint 1996: 86 [to synonymy].

Distribution. —Colombia, Costa Rica, Ecuador, El Salvador, Grenada, Panama, Tobago, Trinidad, Venezuela.

falsa (Santos, Takiya, & Nessimian, 2013): 448 [type locality: Costa Rica, Puntarenas, La Gamba, Esquinas Lodge, river at waterfall trail, 08°41'05" 83°12'17"W, 70 m; INBIO; ♂; ♀; in *Costatrichia*]. —Santos et al. 2016a: 472 [to *Leucotrichia*]. —Armitage et al. 2020: 4 [distribution; as *Costatrichia*].

Distribution. —Costa Rica, Panama.

forrota Oláh & Johanson, 2011: 160 [type locality: Peru, San Martín Province, Río Huallaga tributary, small river passing Chazuta, NHRS; ♂]. —Oláh and Flint 2012: 176 [distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 22 [♂]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador, Peru.

fulminea Thomson & Holzenthal, 2015: 23 [type locality: Ecuador, Cañar, Río Chauchas, 3 km N Zhud; NMNH; ♂]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador.

gomezi Flint, 1970: 7 [type locality: Dominican Republic, La Palma, 12 km E El Rio; NMNH; ♂; larva, case]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 84 [checklist]. —Flint and Sykora 2004: 32 [distribution]. —Pérez-Gelabert 2008: 300 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 24 [♂].

Distribution. —Dominican Republic.

hispida Thomson & Holzenthal, 2015: 25 [type locality: Costa Rica, San José, Río Savegre, 9°33.9'N, 83°48'W, 2270 m; NMNH; ♂].

Distribution. —Costa Rica.

imitator Flint, 1970: 8 [type locality: Mexico, Vera Cruz, Plan del Rio Ver, Rt. 140, km 368; NMNH; ♂; larva; case]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Holzenthal 1988: 61 [checklist]. —Bueno-Soria et al. 2007: 33 [distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 26 [♂]. —Razo-González 2018: 32 [distribution].

Distribution. —Costa Rica, Guatemala, Mexico.

inflaticornis Botosaneanu in Botosaneanu and Alkins-Koo 1993: 10 [type locality: Trinidad, 2nd. order stream at “La Laja”, catchment of Rio Guanapo; ZMUA; ♂; larva; case]. —Botosaneanu and Sakal 1992: 201 [distribution; ecology]. —Flint 1996b: 89 [distribution]. —Botosaneanu 2002b: 84 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 27 [♂].

Distribution. —Trinidad.

inops Flint, 1991b: 43 [type locality: Colombia, Dpto. Antioquia, 12 km E Medellín, road to Sta. Elenal NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 27 [♂; distribution].

Distribution. —Colombia, Ecuador.

interrupta Flint, 1991b: 41 [type locality: Colombia, Dpto. Antioquia, Quebrada Espadera, 7 km E Medellín, on road to Sta. Elena; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 28 [♂].

Distribution. —Colombia.

kateae Thomson & Holzenthal, 2015: 29 [type locality: Venezuela, Aragua, 1 km E Estación Biológica Rancho Grande, 10.352°N, 67.680°W, 1100 m; UMSP; ♂].

Distribution. —Venezuela.

laposka Oláh & Johanson, 2011: 162 [type locality: Peru, San Martín Province, creek crossing road Juan Guerra-Chazuta, 14 km (rd.) E Colombia Bridge; NHRS; ♂]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 30 [♂].

Distribution. —Peru.

lerma Angrisano & Burgos, 2002: 106 [type locality: Argentina, Salta, Rí Lesser, 18 km NW Salta; IML; ♂]. —Thomson 2012: 2 [checklist]. —Isa Miranda and Rueda Martín 2014: 196 [larva; pupa; case; distribution]. —Thomson and Holzenthal 2015: 31 [♂].

Distribution. —Argentina.

limpia Ross, 1944: 273 [type locality: United States, Texas, Fort Davis, Limpia Creek; INHS; ♂; ♀]. —Flint 1970: 6 [♂]. —Edwards 1973: 506 [distribution]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Blickle 1979: 50, 57 [checklist; ♂]. —Holzenthall 1988: 61 [distribution]. —Moulton et al. 1994: 170 [distribution]. —Flint 1996b: 86 [correction of errors in 1970 paper]. —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Bowles et al. 2007: 21 [distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthall 2015: 31 [♂; distribution].

Distribution. —Costa Rica, Mexico, U.S.A.

melleopicta Mosely, 1934a: 157 [type locality: Mexico, Tabasco, Teapa; NHMUK; ♂]. —Flint 1970: 5 [♂]. —Bueno-Soria and Flint 1978: 200 [distribution]. —Flint 1981: 25 [♂; distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthall 2015: 9 [♂]. —Armitage et al. 2016: 8 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Mexico, Panama, Venezuela.

mutica Flint, 1991b: 39 [type locality: Colombia, Dpto. Antioquia, Quebrada Honda, Marsella, 12 km SW Fredonia; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthall 2015: 32 [♂]. —Armitage et al. 2018: 5 [distribution]. —Harris and Armitage 2019: 4, 20 [distribution; ♂].

Distribution. —Panama, Colombia.

padera Flint, 1991b: 41 [type locality: Colombia, Dpto. Antioquia, Quebrada Espadera, 7 km E Medellín, road to Sta. Elena; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthall 2015: 33 [♂].

Distribution. —Colombia.

pectinata Thomson & Holzenthall, 2015: 34 [type locality: Ecuador, Tungurahua, 13 km E Baños, 1550 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador.

pictipes (Banks, 1911): 359 [type locality: United States, New York, Johnstown, Hales Creek; MCZ; ♂; in *Orthotrichia*]. —Betten 1934: 152 [checklist]. —Ross 1938b: 10 [lectotype designated; as *Stactobia pictipes* (Banks); ♂]. —Ross 1944: 120 [to *Leucotrichia*; larva; case]. —Denning 1947b: 170 [distribution]. —Denning 1947a: 145 [♂; distribution]. —Nielsen 1948: 11 [misidentified as *Ithytrichia confusa* Morton]. —Etnier 1965: 147 [checklist]. —Flint 1970: 10 [♂; distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 50, 57 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —McAuliffe 1982: 1557 [biology; distribution]. —Hamilton et al. 1983: 18 [distribution]. —McAuliffe 1984: 894 [ecology; distribution]. —Lake 1984: 220 [distribution]. —Hart 1985b: 40 [ecology]. —Hart 1985a: 404 [ecology]. —Hart and Robinson 1990: 1496 [ecology]. —Tarter 1990: 239 [checklist]. —Hart et al. 1991: 330 [ecology]. —Harris et al. 1991: 217 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Hart 1992: 222 [ecology]. —Moulton and Stewart 1996: 108 [♂; larva; distribution].

distribution]. —Houp 1999: 2 [distribution]. —Ruiter 1999: 165 [distribution]. —Newell et al. 2001: 192 [distribution; phenology]. —Houghton et al. 2001: 505 [distribution]. —Keiper and Bartolotta 2003: 255 [ecology; distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 332 [biology; distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Myers et al. 2011: 107 [distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 35[♂]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Mexico, U.S.A.

repanda Thomson & Holzenthal, 2015: 37 [type locality: Venezuela, Sucre, Península de Paria, Santa Isabel, Río Sta. Isabel, 10°44.294'N, 62°38.954'W, 20 m; UMSP; ♂].

Distribution. —Venezuela.

rhomba Thomson & Holzenthal, 2015: 38 [type locality: Costa Rica, Puntarenas, Río Jaba at rock quarry, 1.4 km (air) W Las Cruces, 8.79°N, 82.97°W, 1150 m; UMSP; ♂]. —Harris and Armitage 2019: 4, 20, 21 [distribution; ♂].

Distribution. —Costa Rica, Panama.

riostoumae Thomson & Holzenthal, 2015: 39 [type locality: Ecuador, Imbabura, Reserva los Cedros, Río de la Plata, 00.32495°N, 78.78084°W, 1587 m; UMSP; ♂]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador.

sarita Ross, 1944: 274 [type locality: United States, Texas, Balmorhea, along stone irrigation flume; INHS; ♂]. —Flint 1968a: 38 [♂; ♀; larva; pupa; distribution]. —Flint 1970: 9 [♂; larva; case; distribution]. —Edwards 1973: 506 [distribution]. —Buneo-Soria and Flint 1978: 200 [distribution]. Blickle 1979: 50, 57 [checklist; ♂]. —Holzenthal 1988: 61 [distribution]. —Flint and Sykora 1993: 54 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Bowles et al. 2007: 21 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 40 [♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Costa Rica, El Salvador, Grenada, Guatemala, Mexico, Nicaragua, U.S.A.

sidneyi Thomson & Holzenthal, 2015: 42 [type locality: Venezuela, T. F. A., Camp IV, 0°58'N, 65°57'W, Cerro d. l. Neblina, 760 m; NMNH; ♂].

Distribution. —Venezuela.

tapantia Thomson & Holzenthal, 2015: 42 [type locality: Costa Rica, Cartago, Reserva Tapantí, waterfall, ca. 1 km (road) NW tunnel, 9.69°N, 83.76°W, 1600 m; UMSP; ♂].

Distribution. —Costa Rica.

termitiformis Botosaneanu in Botosaneanu and Alkins-Koo 1993: 13 [type locality: Trinidad, stream below Maracas waterfall; ZMUA; ♂; larva]. —Botosaneanu and Sakal 1992: 201 [distribution; ecology]. —Flint 1996b: 89 [distribution]. —Botosaneanu 2002b: 84 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 43 [♂].

Distribution. —Trinidad.

topora (Oláh & Flint, 2012): 156 [type locality: Panama, Barro Colorado Island, Snyder-Molino trail, marker 3; NMNH; ♂; in *Ascotrichia*]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Santos 2020: 229 [to *Leucotrichia*].

Distribution. —Panama.

tritoven Flint, 1996b: 89 [type locality: Trinidad, streamlet, Lalaja Road, 10°43'N, 61°17'W; NMNH; ♂]. —Botosaneanu 2002b: 84 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 44 [♂; distribution].

Distribution. —Guyana, Tobago, Trinidad, Venezuela.

tubifex Flint, 1964: 44 [type locality: Puerto Rico, Maricao, at fish hatchery NMNH; ♂; ♀; larva; pupa; case]. —Flint 1968b: 33 [♂; ♀; larva; pupa; distribution]. —Flint 1968a: 81 [checklist]. —Flint 1970: 7 [♂; larva; case; distribution]. —Botosaneanu 1991: 116 [distribution]. —Botosaneanu 1995a: 22 [distribution]. —Botosaneanu and Bolland 1997: 71 [parasitized by mite, genus *Leptus*]. —Botosaneanu and Hyslop 1998: 7 [distribution]. —Flint and Pérez-Gelabert 1999: 39 [checklist]. —Botosaneanu 2002b: 84 [checklist]. —Flint and Sykora 2004: 32 [distribution]. —Pérez-Gelabert 2008: 300 [checklist]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 45 [♂].

Distribution. —Dominican Republic, Haiti, Jamaica, Puerto Rico.

viridis Flint, 1967b: 10 [type locality: Guatemala, Izabal, Las Escobas near Matias de Galvez; NMNH; ♂]. —Flint 1970: 5 [♂; distribution]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Aguila 1992: 538 [distribution]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 46 [♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —El Salvador, Guatemala, Mexico, Panama.

yungarum Angrisano & Burgos, 2002: 105 [type locality: Argentina, Salta, Finca Jakúlica, 630 m; IML; ♂]. —Thomson 2012: 2 [checklist]. —Thomson and Holzenthal 2015: 47 [♂].

Distribution. —Argentina.

zopilote (Holzenthal & Harris, 1999): 561 [type locality: Costa Rica, Guanacaste, Parque Nacional Rincón de la Vieja, Guebrada Zopilote, 10.765°N, 85.309°W; NMNH; ♂; ♀; in *Costatrichia*]. —Santos et al. 2016a: 472 [to *Leucotrichia*].

Distribution. —Costa Rica.

Genus *Peltopsyche* Müller, 1879

Peltopsyche Müller, 1879a: 144 [type species: *Peltopsyche sieboldi* Müller, 1879a, subsequent selection of Fischer 1961]. —Ulmer 1957: 172 [bibliography; discussion]. —Marshall 1979b: 179 [generic review]. —Flint et al. 1999a: 118 [discussion].

Abtrichia Mosely, 1939a: 224 [type species *Abtrichia antennata* Mosely, 1939a, original designation]. —Marshall 1979b: 183 [generic revision]. —Santos et al. 2016a: 472 [to synonymy].

The genus *Peltopsyche* was established for two species recorded from Brazil, and now currently contains a total of six species. In the original descriptions only a few larval features and the basal antennal segments of males are figured. Marshall (1979b) commented that, because the general larval morphology is very similar to that of *Zumatrichia* and the case is highly similar to that of *Leucotrichia*, *Peltopsyche* may one day prove to be a senior synonym of one or more of the other leucotrichiine genera. Santos et al. (2016a) proved this prediction true when they synonymized *Abtrichia*, a change supported by both morphological and molecular data.

antennata (Mosely, 1939a): 227 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂; in *Abtrichia*]. —Flint 1972b: 233 [♂; larva; distribution; in *Abtrichia*]. —Angrisano 1995a: 505 [distribution]. —Angrisano 1999: 31 [checklist]. —Angrisano 2002: 406 [pupa]. —Blahnik et al. 2004: 4 [distribution]. —Paprocki et al. 2004: 10 [checklist]. —Angrisano and Sganga 2007: 29 [♂; larva; pupa; distribution]. —Dumas et al. 2010: 8 [distribution]. —Oláh and Flint 2012: 138 [distribution]. —de Souza et al. 2013: 585 [distribution]. —Paprocki and França 2014: 39 [checklist]. —Santos et al. 2016a: 472 [to *Peltopsyche*].

Distribution. —Argentina, Brazil, Uruguay.

epara (Oláh & Flint, 2012): 139 [type locality: Argentina, Tucumán Province, South of Concepción; NMNH; ♂; in *Abtrichia*]. —Santos et al. 2016a: 472 [to *Peltopsyche*].

Distribution. —Argentina.

sieboldi Müller, 1879a: 144 [type locality: Brazil, Santa Catarina, Garcia, Encano, and Warnow Rivers, tributaries of the Itajahy River; type depository unknown; case; ♂ antenna, larva]. —Müller 1880b: 133 [larval case]. —Müller 1880a: 83 [larval case]. —Müller 1921: 386 [♂ antenna]. —Ulmer 1957: 172 [bibliography; possibly *Abtrichia antennata*]. —Angrisano 1999: 35 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Paprocki and França 2014: 54 [checklist].

Distribution. —Brazil.

squamosa (Mosely, 1939a): 226 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂; in *Abtrichia*]. —Angrisano 1999: 31 [checklist]. —Blahnik et al. 2004: 4 [distribution]. —Paprocki et al. 2004: 10 [checklist]. —Dumas et al. 2009: 365 [distribution]. —Dumas and Nessimian 2012: 14 [checklist]. —Oláh and Flint 2012: 140 [distribution]. —Paprocki and França 2014: 39 [checklist]. —Santos et al. 2016a: 472 [to *Peltopsyche*].

Distribution. —Argentina, Brazil.

vegosa (Oláh & Flint, 2012): 140 [type locality: Paraguay, 2 km South, Cerra Cora; NMNH; ♂; in *Abtrichia*]. —Santos et al. 2016a: 472 [to *Peltopsyche*].

Distribution. —Brazil, Paraguay.

veva (Oláh & Johanson, 2011): 154 [type locality: French Guiana, Maripasoula, Lawa River, Maripasoula, 83 m; 3°37.959'N, 54°1.426'W, 83 m; NHRS; ♂]. —Oláh and Flint 2012: 142 [distribution]. —Santos et al. 2016a: 472 [to *Peltopsyche*].

Distribution. —French Guiana, Guyana.

Genus *Tupiniquintrichia* Santos, Nessimian, and Takiya, 2016

Tupiniquintrichia Santos, Nessimian, & Takiya, 2016: 475 [type species: *Peltopsyche maclachlani* Müller, 1879a, original designation].

Tupiniquintrichia contains two species, one originally described in the genus *Peltopsyche* and the other in *Leucotrichia*. The known distribution of the genus is limited to Brazil. The unique antennal organization can be used to define the genus, along with features of the male genitalia (Santos et al. 2016a). A larval description has been written for *P. maclachlani*.

maclachlani (Müller, 1879a): 144 [type locality: Brazil, Santa Catarina, Warnow River, tributary of Itajahy River; MNRJ; case; ♂; antenna; larva; in *Peltopsyche*]. —Müller 1880b: 133 [larval case]. —Müller 1880a: 83 [larval case]. —Müller 1921: 386 [♂; antenna]. —Ulmer 1957: 172 [bibliography]. —Paprocki et al. 2004: 12 [checklist]. —Paprocki and França 2014: 54 [checklist]. —Santos et al. 2016a: 476 [♂, to *Tupiniquintrichia*; type status].

Distribution. —Brazil.

procera (Thomson & Holzenthal, 2015): 37 [type locality: Brazil, Minas Geras, Córrego da Serra de Ouro, Fino, Vale do Tropeiro, 20°12.371'S, 43°38.581'W, 1000 m; MZUSP; ♂; in *Leucotrichia*]. —Santos et al. 2016a: 476 [to *Tupiniquintrichia*].

Distribution. —Brazil.

Genus *Zumatrichia* Mosely, 1937

Zumatrichia Mosely, 1937b: 187 [type species: *Zumatrichia filosa* Mosely, 1937b, original designation]. —Flint 1970: 16 [revision]. —Marshall 1979b: 179 [generic review]. —Blickle 1979: 6 [key to species of America north of Mexico]. —Pes and Hamada 2004: 31 [new records]. —Oláh and Johanson 2011: 152 [placement in *Leucotrichia* genus cluster].

Zumatrichia contains 53 species occurring in Central America to northern South America, throughout the Lesser Antilles, and also in Mexico and the United States. Marshall (1979b) outlined four main species groups (*filosa*, *galtena*, *multisetosa*, and *palmara*) within the genus based on features of the male genitalia, a modification of the five originally outlined by Flint (1970). Larval descriptions have been published for *Z. antilliensis*, *Z. anomaloptera*, *Z. multisetosa*, and *Z. notosa* (Flint 1968a; Wiggins 1996).

alarca Oláh & Johanson, 2011: 164 [type locality: Peru, San Martin Prov., Rio Huallaga tributary, small river passing Chazuta, 6°34.665'S, 76°08.209'W; NHRS; ♂].

Distribution. —Peru.

angulata Flint, 1970: 21 [type locality: Panama, Chiriqui, Rovira, David; NMNH; ♂]. —Aguila 1992: 538 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

anomalopectera Flint, 1968a: 37 [type locality: Grenada, Balthazar, NMNH; ♂; ♀]. —Malicky 1983c: 264 [distribution]. —Botosaneanu 1988: 221 [♂; ♀; distribution]. —Botosaneanu and Sakal 1992: 201 [distribution; ecology]. —Botosaneanu and Alkins-Koo 1993: 7 [distribution]. —Flint and Sykora 1993: 55 [distribution]. —Botosaneanu 1994a: 37 [distribution]. —Flint 1996b: 85 [distribution]. —Botosaneanu 2002b: 89 [checklist]. —Botosaneanu and Thomas 2005: 45 [distribution].

Distribution. —Dominica, Grenada, Guadeloupe, Martinique, St. Lucia, St. Vincent, Tobago, Trinidad.

antilliensis Flint, 1968a: 34 [type locality: Dominica, Clarke Hall; NMNH; ♂; ♀; larva; pupa; case]. —Malicky 1983c: 264 [distribution]. —Botosaneanu 1988: 221 [♂; ♀; distribution]. —Flint and Sykora 1993: 54 [distribution]. —Botosaneanu 1994a: 37 [distribution]. —Flint 1996b: 85 [distribution]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 89 [checklist]. —Botosaneanu and Thomas 2005: 45 [distribution]. —Oláh and Flint 2012: 177 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Ríos-Touma et al. 2017: 11 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Colombia, Dominica, Ecuador, Grenada, Guadeloupe, Martinique, Panama, St. Lucia, St. Vincent, Venezuela.

atmena Oláh & Flint, 2012: 177 [type locality: Venezuela, Aragua State, Cuyagua, Rio Grande; NMNH; ♂].

Distribution. —Venezuela.

attenuata Flint, 1970: 22 [type locality: Costa Rica, Cartago, Quebrado Relleno, La Cruzada, E Turrialba; NMNH; ♂]. —Holzenthal 1988: 63 [distribution]. —Armitage et al. 2015b: 6 [distribution]. —Armitage et al. 2015a: 7 [distribution]. —Armitage and Harris 2018b: 99 [checklist]. —Armitage and Harris 2018c: 284 [distribution].

Distribution. —Costa Rica, Panama.

befela Oláh & Flint, 2012: 179 [type locality: Venezuela, Barinas State, Rio Santo Domingo, Barinas; NMNH; ♂].

Distribution. —Venezuela.

bevagota Oláh & Flint, 2012: 180 [type locality: Ecuador, Cotopaxi Province, Quevedo (36 km Northeast), 1100 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

bifida Flint, 1970: 21 [type locality: Costa Rica, San Jose, Rio General, Pacuare; NMNH; ♂]. —Holzenthal 1988: 63 [distribution]. —Aguila 1992: 538 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Costa Rica, Panama.

caudifera Flint, 1970: 23 [type locality: Panama, Chiriqui, Dolega; NMNH; ♂]. —Holzenthal 1988: 63 [distribution]. —Aguila 1992: 538 [distribution]. —Chamorro-Lacayo et al. 2007: 44 [checklist]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Costa Rica, Nicaragua, Panama.

chiriquiensis Flint, 1970: 20 [type locality: Panama, Chiriqui, Dolega; NMNH; ♂]. —Holzenthal 1988: 64 [distribution]. —Aguila 1992: 538 [distribution]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Costa Rica, Panama.

corosa Oláh & Flint, 2012: 181 [type locality: Ecuador, Cotopaxi Province, Quevedo (36 km Northeast), 1100 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

dereka Oláh & Flint, 2012: 183 [type locality: Panama, San Blas Province, Rio Carti Grande, 2 km West Nusagandi; NMNH; ♂]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

diamphidia Flint, 1970: 12 [type locality: Costa Rica, Puntarenas, 2.8 miles E Golfito; NMNH; ♂]. —Holzenthal 1988: 64 [distribution].

Distribution. —Costa Rica.

echinata Flint, 1967b: 11 [type locality: Guatemala, El Progreso, San Agustin Acasaguastlan; NMNH; ♂]. —Flint 1970: 18 [distribution]. —Chamorro-Lacayo et al. 2007: 44 [checklist].

Distribution. —Guatemala, Honduras, Nicaragua.

felfesa Oláh & Flint, 2012: 184 [type locality: Venezuela, Zulia State, Perijo El Tucuco, Mission el Tucuco, Rio El Tucuco, 0.5 km from Church; NMNH; ♂].

Distribution. —Venezuela.

fesuka Oláh & Flint, 2012: 185 [type locality: Ecuador, Napo Province, Pano, at stream, 580 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

filosa Mosely, 1937b: 187 [type locality: Mexico, Chiapas, Saltenango de la Paz; NHMUK; ♂]. —Flint 1970: 23 [♂; distribution]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Maes and Flint 1988: 4 [distribution]. —Holzenthal 1988: 64 [distribution]. —Maes 1999: 1195 [checklist]. —Chamorro-Lacayo et al. 2007: 44 [checklist]. —Barba-Álvarez et al. 2019: 86 [distribution].

Distribution. —Costa Rica, Guatemala, Mexico, Nicaragua.

flinti Harris & Armitage, 2019: 18 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

galtena Mosely, 1937b: 188 [type locality: Mexico, Chiapas, Saltenango de la Paz; NHMUK; ♂]. —Flint 1970: 19 [♂; distribution]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Holzenthal 1988: 64 [distribution]. —Chamorro-Lacayo et al. 2007: 44 [checklist]. —Armitage et al. 2015b: 6 [distribution]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist]. —Armitage and Harris 2018c: 284 [distribution]. —Harris and Armitage 2019: 6 [distribution].

Distribution. —Costa Rica, Honduras, Mexico, Nicaragua, Panama.

gorba Oláh & Flint, 2012: 187 [type locality: Ecuador, Zamora Chinchipe Province, Rio Chicana, 9 km North Yanzatza, 880 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

gula Oláh & Flint, 2012: 188 [type locality: Venezuela, Barinas State, Rio Santo Domingo, Barinas; NMNH; ♂].

Distribution. —Venezuela.

haroma Oláh & Flint, 2012: 189 [type locality: Venezuela, Barinas State, Puente Parangula, 8 km South Barinitas; NMNH; ♂].

Distribution. —Venezuela.

hazela Harris & Armitage, 2019: 19 [type locality: Panama, Bocas del Toro Province, tributary of Quebrada Rambala, Rambala Jungle Lodge, 3.7 km SSE Rambala, 8.91627°N and 82.15469°W, 134 m; COZEM; ♂].

Distribution. —Panama.

kerekeda Oláh & Flint, 2012: 191 [type locality: Colombia, Rio Raposo; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [distribution].

Distribution. —Colombia, Ecuador.

kisgula Oláh & Flint, 2012: 192 [type locality: Ecuador, Napo Province, Lago Agrio (48 km West), Rio Aguarico; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

kislaba Oláh & Flint, 2012: 194 [type locality: Ecuador, Pastaza Province, Puyo (3 km West); NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

koztesa Oláh & Flint, 2012: 195 [type locality: Venezuela, Aragua State, Parque Nacional Henri Pittier, Rio La Trilla, 22.5 km North of Rancho Grande on Road; NMNH; ♂].

Distribution. —Venezuela.

lapa Oláh & Flint, 2012: 196 [type locality: Ecuador, Pastaza Province, Puyo (27 km North), Estacion Fluviometrica; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

lezarda Malicky, 1980b: 220 [type locality: Guadeloupe, Mittellauf de Flusses Lezard bei Chemin de Diane; Collection Malicky; ♂]. —Malicky 1983c: 264 [checklist]. —Flint and Sykora 1993: 49 [checklist]. —Botosaneanu 2002b: 89 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Guadeloupe.

longispinga Bueno-Soria, 1983a: 454 [type locality: Mexico, Veracruz, Los Tuxtlas area, Rio La Palma; NMNH; ♂].

Distribution. —Mexico.

marica Flint, 1981: 26 [type locality: Venezuela, Aragua, Maracay, Río Limón, Estacion Piscicultura; NMNH; ♂].

Distribution. —Venezuela.

masa Oláh & Flint, 2012: 198 [type locality: Ecuador, Pastaza Province, Puyo; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

maskara Oláh & Flint, 2012: 199 [type locality: Panama, San Blas Province, Rio Carti Grande, 2 km West Nusagandi; NMNH; ♂]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

maskoska Oláh & Flint, 2012: 201 [type locality: Venezuela, Zula State, Perijo El Tucuco, Mission El Tucuco, Rio El Tucuco, 0.5 km from Church; NMNH; ♂].

Distribution. —Venezuela.

multisetosa Flint, 1970: 17 [type locality: Guatemala, Suchitepequez, Cuyotenango; NMNH; ♂; larva; case]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Holzenthall 1988: 64 [distribution]. —Barba-Álvarez et al. 2019: 86 [distribution].

Distribution. —Costa Rica, Guatemala, Honduras, Mexico.

nelkula Oláh & Flint, 2012: 202 [type locality: Panama, San Blas Province, Rio Carti Grande, 2 km West Nusagandi; NMNH; ♂]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

notosa (Ross), 1944: 271 [type locality: [U.S.A.] Missouri River, Toston, Montana; INHS; ♂; ♀; in *Leucotrichia*]. —Flint 1970: 20 [♂; to *Zumatrichia*]. —Blickle 1979: 55, 57 [checklist; ♂]. —Ruiter 1999: 166 [distribution]. —Houghton 2001: 90 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [distribution; biology].

Distribution. —U.S.A.

palmara Flint, 1970: 22 [type locality: El Salvador, La Libertad, Rio El Palmar, 15 miles N La Libertad; NMNH; ♂]. —Holzenthall 1988: 64 [distribution]. —Flint and Reyes 1991: 484 [distribution]. —Chamorro-Lacayo et al. 2007: 44 [checklist]. —Armitage et al. 2015a: 8 [checklist]. —Ríos-Touma et al. 2017: 11 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Costa Rica, Ecuador, El Salvador, Nicaragua, Panama, Peru.

picigula Oláh & Flint, 2012: 203 [type locality: Ecuador, Napo Province, Rio Jondachi, 30 km North Tena, 950 m; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

rhamphoides Flint, 1970: 24 [type locality: Costa Rica, Puntarenas, Rio La Vieja, near Lagarto; NMNH; ♂]. —Holzenthall 1988: 64 [distribution]. —Aguila 1992: 538 [distribution]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist; as *rhampiodes*]. —Harris and Armitage 2019: 6 [distribution].

Distribution. —Costa Rica, Panama.

saluda Flint, 1970: 19 [type locality: Panama, Canal Zone, pipeline road, Rio Agua Salud; NMNH; ♂]. —Aguila 1992: 538 [distribution]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

simá Oláh & Flint, 2012: 205 [type locality: Ecuador, Pichincha Province, Santo Domingo de los Colorados, 14 km East; NMNH; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

sortetla Oláh & Flint, 2012: 206 [type locality: Panama, Darien Province, Rio Tuirá at Rio Pucuro; NMNH; ♂]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

strobilina Flint, 1970: 20 [type locality: Costa Rica, Cartago, 3 miles W Turrialba; NMNH; ♂]. —Holzenthal 1988: 64 [distribution].

Distribution. —Costa Rica.

teapa Flint, 1970: 24 [type locality: Mexico, Tabasco, Rio Puyacatengo, E Teapa; NMNH; ♂]. —Bueno-Soria and Flint 1978: 201 [distribution].

Distribution. —Mexico.

teribe Harris & Armitage, 2015: 2 [type locality: Panama, Chiriquí Province, Cuenca 108, Quebrada Grande, Boquete, Valle Escondido, below Sabor Restaurant, 8.77970°N 82.44016°W, 1122 m; MIUP; ♂]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist]. —Armitage and Harris 2018c: 284 [distribution]. —Harris and Armitage 2019: 6 [distribution].

Distribution. —Panama.

tompagula Oláh & Flint, 2012: 207 [type locality: Colombia, Meta Department, Quebrada Blanca, 3 km West Restrepo; NMNH; ♂].

Distribution. —Colombia.

turuda Oláh & Flint, 2012: 208 [type locality: Panama, San Blas Province, Quebrada Pingadi, 9 km North Nusagandi; NMNH; ♂]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

tusa Oláh & Flint, 2012: 210 [type locality: Colombia, Choco department, Rio Atrato, Yuto; NMNH; ♂].

Distribution. —Colombia, Venezuela.

varrata Oláh & Johanson, 2011: 165 [type locality: Peru, San Martin Prov., Rio Huallaga tributary, small river passing Chazuta, 6°34.665'S, 76°08.209'W; NHRS; ♂].

Distribution. —Peru.

vieja Flint, 1970: 19 [type locality: Costa Rica, Puntarenas, Rio La Vieja, near Lagarto, E Palmar Norte; NMNH; ♂]. —Holzenthal 1988: 64 [distribution].

Distribution. —Costa Rica.

zegla Harris & Armitage, 2015: 4 [type locality: Panama, Bocas del Toro Province, Cuenca 91, Río Teribe at Zegla; NMNH; ♂]. —Armitage et al. 2015a: 8 [checklist]. —Armitage and Harris 2018b: 99 [checklist].

Distribution. —Panama.

Subfamily NEOTRICHIIINAE Ross, 1956

Neotrichiini Ross, 1956: 18 [type genus: *Neotrichia* Morton, 1905]. —Marshall 1979b: 188 [reviewed as tribe Neotrichiini]. —Oláh and Johanson 2011: 167 [generic character states].

The subfamily Neotrichiinae contains four genera occurring in the Nearctic and Neotropical faunal regions. The name Neotrichiinae, as the tribe Neotrichiini, was first used by Ross (1956) in a phylogenetic diagram, although no diagnosis was outlined until Marshall (1979b). Notable features are their exceptionally small adult size (generally less than 2 mm), even for microcaddisflies; larvae construct cylindrical cases and have associated limnephiloid morphological features, as opposed to the more typical hydropetrid purse-case (Marshall 1979b). Larval descriptions have been provided for all genera.

Genus *Kumanskiella* Harris & Flint, 1992

Kumanskiella Harris & Flint, 1992: 581 [type species: *Kumanskiella karenae* Harris & Flint, 1992, original designation]. —Oláh and Johanson 2011: 167 [in Neotrichiini].

The genus *Kumanskiella* includes two species recorded from Cuba and Puerto Rico. Although both the larvae and adults possess features that are intermediate between the genera *Mayatrichia* and *Neotrichia*, the species do not fit well within the limits of either previously established genus (Harris and Flint 1992). Harris and Flint (1992) gave a larval description for the type species, *K. karenae*.

aliena (Kumanski, 1987): 24 [type locality: Cuba, Province Las Villas, Sierra de Trinidad, road Trinidad-Topes de Collantes; SOFM; ♂; in *Mayatrichia*]. —Harris and Flint 1992: 587 [♂; to *Kumanskiella*]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 83 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

karenae Harris & Flint, 1992: 582 [type locality: Puerto Rico, El Verde Field Station, Quebrada Prieta; NMNH; ♂; ♀; larva; case]. —Botosaneanu 2002b: 83 [checklist].

Distribution. —Puerto Rico.

Genus *Mayatrichia* Mosely, 1937

Mayatrichia Mosely, 1937b: 182 [type species: *Mayatrichia ayama* Mosely, 1937b, original designation]. —Ross 1944: 1278 [species key to males]. —Marshall 1979b: 191 [generic review]. —Blickle 1979: 7 [key to species of America north of Mexico]. —Harris and Holzenthal 1990: 453 [revision; key]. —Moulton and Stewart 1996: 109 [key to species of the Interior Highlands of North America].

Mayatrichia currently consists of seven species occurring widely through North and Central America. Diagnostic characteristics of the adults include features of the thorax and male genitalia (Harris and Holzenthal 1990). Descriptions of the larvae and cases have been published for *M. ayama* (Ross 1944) and *M. ponta* (Wiggins 1996).

acuna Ross, 1944: 279 [type locality: [United States], Texas, Del Rio, San Felipe Springs; INHS; ♂]. —Edwards 1973: 506 [distribution]. —Blickle 1979: 50, 59 [checklist; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Bowles et al. 2007: 21 [distribution; biology].

Distribution. —U.S.A.

ayama Mosely, 1937b: 182 [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂]. —Ross 1944: 160 [♂; larva; case; distribution]. —Denning 1947b: 176 [distribution]. —Denning 1947a: 146 [distribution]. —Etnier 1965: 147 [checklist]. —Edwards 1973: 506 [distribution]. —Roy and Harper 1975: 1083 [distribution]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Roy and Harper 1979: 152 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 50, 57 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1982a: 511 [distribution]. —Harris et al. 1982b: 81 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Harris et al. 1984: 108 [distribution]. —Holzenthal 1988: 61 [distribution]. —Morse et al. 1989: 22 [distribution]. —Harris and Holzenthal 1990: 458 [♀; distribution]. —Harris et al. 1991: 218 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Moulton et al. 1994: 170 [distribution]. —Moulton and Stewart 1996: 109 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Maes 1999: 1194 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —DeWalt and Heinold 2005: 42 [phenology; distribution]. USA —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Blinn and Ruiter 2009a: 305 [biology]. —Bowles et al. 2007: 21 [distribution; biology]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Etnier 2010: 485 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Flint 2011: 104 [checklist]. —Myers et al. 2011: 107 [distribution]. —Harris et al. 2012: 8 [checklist]. —Denson et al. 2016: 5 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Canada, Costa Rica, Honduras, Mexico, Nicaragua, U.S.A.

illobia Harris & Holzenthal, 1990: 456 [type locality: Costa Rica, Puntarenas, Río Guineal, ca. 1 km (air) E Finca Helechales, 9.076°N 83.092°W; NMNH; ♂; ♀]. —Ríos-Touma et al. 2017: 10 [checklist]. —Armitage et al. 2020: 4 [distribution].

Distribution. —Costa Rica, Ecuador, Panama.

moselyi Blickle & Denning, 1977: 297 [type locality: [United States], Utah, Sevier River, near Rock Canyon Mountain; ESUW; ♂; ♀]. —Blickle 1979: 50, 59 [checklist; ♂].

Distribution. —U.S.A.

ponta Ross, 1944: 278 [type locality: [United States], Oklahoma, Turner Falls State Park, along Honey Creek; INHS; ♂]. —Blickle 1979: 50, 59 [checklist; ♂]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 110 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Blinn and Ruitter 2005: 69 [distribution; biology]. —Wang and Kennedy 2004: 523 [distribution; life history]. —Bowles et al. 2007: 21 [distribution; biology].

Distribution. —U.S.A.

rualda Mosely, 1937b: 183 [type locality: Mexico, Chiapas, Barranca Honda; NHMUK; ♂]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Holzenthal 1988: 62 [distribution]. —Harris and Holzenthal 1990: 456, 459 [♀; distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist].

Distribution. —Costa Rica, Mexico, Nicaragua.

tuscaloosa Harris & Sykora, 1996: 23 [type locality: [United States], Alabama, Tuscaloosa County, Big Sandy Creek at 4.5 mi south of Coaling on an unnumbered county road; CMNH; ♂]. —Harris et al. 1991: 235 [distribution]. —Frazer and Harris 1991a: 366–367 [♂]. —Harris and Flint 2016: 7 [♂; distribution].

Distribution. —U.S.A.

Genus *Neotrichia* Morton, 1905

Cyllene Chambers, 1873: 124 [type species *Cyllene minutisimella* Chambers, 1873, monotypic. Preoccupied several times, *vide* Fischer, 1961].

Neotrichia Morton, 1905: 72 [type species: *Neotrichia collata* Morton, 1905, monotypic]. —Ross 1944: 154 [species key for adults]. —Marshall 1979b: 189 [generic review]. —Blickle 1979: 21 [key to species of America north of Mexico]. —Flint 1991b: 53 [key to Antioquian species]. —Moulton and Stewart 1996: 111 [key to species of the Interior Highlands of North America]. —Harris and Rasmussen 2010: 25, 42 [key to males and females of the *Neotrichia caxima* group in the southeastern United States]. —Oláh and Johanson 2011: 168 [species groups reviewed]. —Keth et al. 2015: 19 [keys to species in North America Mexico and the Caribbean Islands].

Microsiphon Müller, 1921: 525 [type species: no species ever included. Preoccupied by del Guercio, 1907]. —Flint et al. 1999b: 77 [to synonymy].

Exitrichia Mosely, 1937b: 170 [type species: *Exitrichia anahua* Mosely, 1937b, original designation]. —Ross 1944: 154 [to synonymy].

Dolotrichia Mosely, 1937b: 177 [type species: *Dolotrichia canixa* Mosely, 1937b, original designation]. —Ross 1944: 154 [to synonymy].

Guerrotrichia Mosely, 1937b: 179 [type species: *Guerrotrichia caxima* Mosely, 1937b, original designation]. —Ross 1944: 154 [to synonymy].

Lorotrichia Mosely, 1937b: 181 [type species: *Lorotrichia hiaspa* Mosely, 1937b, original designation]. —Ross 1944: 154 [to synonymy].

Neotrichia consists of 205 species occurring in North, Central, and South America and the West Indies and is one of the most species-rich hydroptilid groups in the Neotropics (Flint et al. 1999a). Marshall (1979b) commented that *Neotrichia* could be divided into groups that correspond roughly to genera that were originally described by Mosely (1937b) and subsequently synonymized by Ross (1944). However, the addition of many new species to the genus has since weakened Marshall's diagnosis of the species groups. *Neotrichia* can be separated from other genera in Neotrichiinae by the tibial spur formula (0, 2, 3) and features of the complicated male genitalia. Larvae of *N. minutisimella* were first described by Ross (1944) and many others have been described since (Flint 1964; Botosaneanu 1994b; Wiggins 1996).

abbreviata Flint, 1983: 48 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NMNH; ♂]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 32 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 46 [checklist].

Distribution. —Brazil, Uruguay.

abbreviatoides Angrisano, 1995a: 513 [type locality: Uruguay, Artigas, Ao. da la Invernada; FHCU; ♂]. —Angrisano 1999: 32 [checklist].

Distribution. —Uruguay.

aequispina Angrisano, 1995a: 515 [type locality: Uruguay, Tacuarembó, Tbo. Chico; FHCU; ♂]. —Angrisano 1999: 32 [checklist]. —Keth 2004: 172 [♂].

Distribution. —Uruguay.

alabamensis Kelley & Harris, 1983: 182 [type locality: [United States], Alabama, Mobile County, Indian Grave Creek near junction with Cedar Creek, 4 miles east of Citronelle; NMNH; ♂]. —Harris et al. 1984: 108 [distribution]. —Harris et al. 1991: 219 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Harris and Rasmussen 2010: 34 [♂; ♀; distribution]. —Harris et al. 2012: 8 [checklist]. —Keth et al. 2015: 40 [♂].

Distribution. —U.S.A.

alata Flint, 1968b: 37 [type locality: Jamaica, Portland, Rio Grande at Fellowship; NMNH; ♂; ♀]. —Flint 1968a: 81 [checklist]. —Botosaneanu 1979: 51 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 85 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Keth et al. 2015: 56 [♂].

Distribution. —Cuba, Jamaica.

alsa Oláh & Johanson, 2011: 169 [type locality: Peru, San Martín Prov., Rio Negro, 37 km (rd.) W Moyobamba, near Olmos-Tarapoto rd., 6°00.278'S 77°15.437'W; NHRS; ♂].

Distribution. —Peru.

alysae Keth in Keth et al. 2015: 57 [type locality: Mexico, Sonora, Rio Aros at Arroyo El Pavo; NMNH; ♂].

Distribution. —Mexico.

amplector Keth, 2004: 164 [type locality: Mexico, Tabasco, Teapa, Grutas de Colona, Rio Puyacatengo; NMNH; ♂]. —Keth et al. 2015: 58 [♂].

Distribution. —Mexico.

amplio Keth, 2004: 164 [type locality: Belize, Orange Walk District, New River Lagoon, dock area at Lamanai Ruins; NMNH; ♂].

Distribution. —Belize.

anahua (Mosely, 1937b): 170 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂; in *Exitrichia*]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Keth et al. 2015: 59 [♂].

Distribution. —Mexico.

anaua Gama Neto & Passos, 2020: 180 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

angulata Flint, 1983: 48 [type locality: Uruguay, Dpto. Artigas, Arroyo de la Invernada; NMNH; ♂]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 32 [checklist].

Distribution. —Uruguay.

anzuelo Armitage & Harris, 2018a: 4 [type locality: Panama, Chiriquí Province, Cuenca 108, Quebrada Jaramillo, Jaramillo Centro road bridge, 8.75454°N, 82.41848°W, 1075 m; COZEM; ♂]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution; as *anzuela*].

Distribution. —Panama.

arista Harris, 1990: 251 [type locality: Venezuela, Territorio Federal Amazonas, Río Cataniapo, 10 km S Puerto Ayacucho; NMNH; ♂].

Distribution. —Venezuela.

arkansasensis Mathis & Bowles, 1990: 90 [type locality: [United States], Arkansas, Madison County, Kings River, 5 mi S Kingston, NW 1/4, SW 1/4, Sect. 4, T 15 N, R 24 W; NMNH; ♂]. —Moulton and Stewart 1996: 112 [♂; distribution]. —Keth et al. 2015: 94 [♂].

Distribution. —U.S.A.

armata Botosaneanu in Botosaneanu and Alkins-Koo 1993: 20 [type locality: Tobago, Argyll River below Argyll waterfall; ZMUA; ♂]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Flint 1996b: 100 [distribution]. —Botosaneanu 2002b: 85 [checklist]. —Keth et al. 2015: 95 [♂].

—species B Botosaneanu and Alkins-Koo, 19923: 23 [♀]. —Flint 1996b: 100 [distribution; to synonymy].

Distribution. —Tobago, Trinidad.

armitagei Harris, 1991: 15 [type locality: [United States], Florida, Okaloosa County, Turkey Gobble Creek at Base Rd. 211, Eglin Air Force Base, 11.2 km NW Niceville; NMNH; ♂]. —Harris and Keth 2002: 76 [♂]. —Pescador et al. 2004: 133 [checklist]. —Harris and Rasmussen 2010: 30 [♂; ♀; distribution]. —Harris et al. 2012: 8 [checklist]. —Keth et al. 2015: 41 [♂]. —Denson et al. 2016: 5 [distribution].

Distribution. —U.S.A.

atopa Thomson & Armitage, 2018: 4 [type locality: Panama, Chiriquí Province, Cuenca 102 (Río Chiriquí Viejo), un. trib., Río Colorado, Mount Totumas Biological Reserve, 8.884717°N, 82.684077°W; COZEM; ♂].

Distribution. —Panama.

baritu Angrisano, 1984: 4 [type locality: Argentina, Salta, Parque Nacional Baritú; MACN; ♂; ♀]. —Angrisano 1999: 32 [checklist]. —Isa Miranda and Rueda Martin 2014: 199 [distribution].

Distribution. —Argentina.

bellini Santos & Nessimian, 2009a: 760 [type locality: Brazil, Amazonas, Rio Preto da Eva (tributary to Rio Preto da Eva, 02°36'45.5"S 59°43'59.1"W); INPA; ♂]. —Paprocki and França 2014: 199 [distribution].

Distribution. —Brazil.

bifida Flint, 1974b: 77 [type locality: Suriname, Lawa River, Anapaike; RMNH; ♂]. —Oláh and Johanson 2011: 170 [distribution].

Distribution. —French Guiana, Suriname.

bifurcata Harris in Flint and Sykora 2004: 34 [type locality: Dominican Republic, Pedernales Province, Rio Mulito, 13 km N Pedernales, 18°09'N 71°46'W, 230 m; CMNH; ♂]. —Pérez-Gelabert 2008: 300 [checklist]. —Keth et al. 2015: 104 [♂].

Distribution. —Dominican Republic.

bika Oláh & Johanson, 2011: 170 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

biuncifera Flint, 1974b: 72 [type locality: Suriname, Käyser Airstrip; RMNH; ♂]. —Ríos-Touma et al. 2017: 10 [distribution].

Distribution. —Ecuador, Suriname.

blinni Ruiters, 2007: 276 [type locality: USA, Arizona, Cochise County, South Fork Cave Creek; NMNH; ♂]. —Keth et al. 2015: 76 [♂].

Distribution. —U.S.A.

botka Oláh & Johanson, 2011: 172 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.551'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

botonia Harris, 1990: 254 [type locality: Venezuela, Territorio Federal Amazonas, San Carlos de Río Negro; NMNH; ♂].

Distribution. —Venezuela.

brevispina Flint, 1983: 51 [type locality: Argentina, Pcia. Misiones, Arroyo Coatí, 13 km E San José; NMNH; ♂]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 32 [checklist]. —Angrisano and Sganga 2007: 38 [♂; distribution].

Distribution. —Argentina, Uruguay.

browni Harris, 1990: 248 [type locality: Venezuela, Territorio Federal Amazonas, San Carlos de Río Negro; NMNH; ♂]. —Santos and Nessimian 2009a: 766 [distribution]. —Paprocki and França 2014: 46 [checklist].

Distribution. —Brazil, Venezuela.

buenoi Harris & Flint, 2016: 2 [type locality: Mexico, Veracruz, Las Tuxtlas, Rio Palma above La Palma; NMNH; ♂].

Distribution. —Mexico.

bullata Flint, 1974b: 71 [type locality: Suriname, Käyser Airstrip; RMNH; ♂]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 32 [checklist]. —Oláh and Johanson 2011: 173 [distribution].

Distribution. —French Guiana, Suriname, Uruguay.

caboca Gama Neto & Passos, 2019: 518 [type locality: Brazil, Roraima, Mucajai municipality, RR-325, Vicinal Apiaú, Igarapé Serrinha (Sítio Vaca), 02°33'7.78"N, 61°18'45.06"W, 74 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

cameria (Mosely, 1937b): 180 [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂; in *Guerrotrichia*]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Keth et al. 2015: 42 [♂].

Distribution. —Mexico.

canixa (Mosely, 1937b): 177 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂; in *Dolotrichia*]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Armitage et al. 2015b: 5 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Keth et al. 2015: 26 [♂]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Mexico, Panama, U.S.A.

capitiana Gama Neto & Passos, 2019: 519 [type locality: Brazil, Roraima, Mucajai municipality, RR-325, Vicinal 9, Apiaú (Sítio Sr. Nonato), small order stream, 2°31'00.78"N, 61°21'44.28"W, 104 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

carlsoni Harris & Armitage, 2019: 12 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

catrimani Gama Neto & Passos, 2020: 181 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

cauame Gama Neto & Passos, 2020: 182 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

caxima (Mosely, 1937b): 179 [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂; in *Guerrotrichia*]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Blickle 1979: 50, 75 [checklist; ♂]. —Keth et al. 2015: 43 [♂].

Distribution. —Mexico.

cayada Harris in Harris and Davenport 1992: 455 [type locality: Venezuela, Territorio Federal Amazonas, Cerro de Neblina, basecamp near Rio Baria; NMNH; ♂].

Distribution. —Venezuela.

chana Angrisano, 1995a: 513 [type locality: Uruguay, Tacuarembó, Tbo. Chico; FHCU; ♂]. —Angrisano 1999: 32 [checklist].

Distribution. —Uruguay.

charrua Angrisano, 1984: 1 [type locality: Argentina, Entre Ríos, Parque Nacional el Palmar; MACN; ♂; ♀]. —Angrisano 1999: 32 [checklist]. —Angrisano and Sganga 2007: 40 [♂; ♀; distribution].

Distribution. —Argentina.

chihuabua Harris & Flint, 2016: 2 [type locality: Mexico, Chihuahua, Río Concheno at Highway 16 near Basaseachic; NMNH; ♂].

Distribution. —Mexico.

chilensis Flint, 1983: 53 [type locality: Chile, Pcia. Linares, Puente Malcho, Río Longavi; NMNH; ♂]. —Angrisano 1999: 33 [checklist].

Distribution. —Argentina, Chile.

cliffordi Keth in Keth et al. 2015: 60 [type locality: U.S.A., Utah, Moab; CAS; ♂].

Distribution. —U.S.A (Utah).

collata Morton, 1905: 72 [type locality: [United States], Ithaca, New York; type depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 163 [wings; palpi; distribution]. —Ross 1944: 159 [♂; ♀; distribution]. —Blickle 1979: 50, 75 [checklist; ♂]. —Morse et al. 1989: 23 [distribution]. —Harris et al. 1991: 220 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Floyd and Morse 1993: 177 [distribution]. —Moulton and Stewart 1996: 112 [♂; distribution]. —Etnier 2010: 486 [distribution]. —Myers et al. 2011: 107 [distribution]. —Flint 2014: 90 [distribution]. —Keth et al. 2015: 61 [♂].

Distribution. —U.S.A.

collierorum Armitage & Harris, 2018a: 4 [type locality: Panama, Chiriquí Province, Cuenca 108, Quebrada Jaramillo, Alto Jaramillo Road, 8.76671°N, 82.41341°W, 1253 m; COZEM; ♂]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Panama.

colmillosa Harris, 1990: 246 [type locality: Venezuela, Territorio Federal Amazonas, Cerro de Neblina basecamp; NMNH; ♂]. —Santos and Nessimian 2009a: 766 [distribution]. —Paprocki and França 2014: 46 [checklist].

Distribution. —Brazil, Venezuela.

colombiensis Harris, 1990: 257 [type locality: Colombia, Antioquia Department, Quebrada la Jiménez, Sopetrán; NMNH; ♂]. —Flint 1991b: 53 [♂; distribution]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

connori Keth in Keth et al. 2015: 77 [type locality: Mexico, Nuevo León, Municipio de Sánchez, Arroyo San Juan on road to Laguna de Sánchez, 3.5 km west of La Cienega, 25.4°N 100.2833°W; PSUC; ♂].

Distribution. —Mexico.

contrerasi Harris & Flint, 2016: 3 [type locality: Mexico, Nuevo Leon, Municipio de Sasntiago, Rio Ramos at Los Adjuntas, 4.5 km southeast Puerto Genoveno, N25°18', W100°08'; NMNH; ♂].

Distribution. —Mexico.

corniculans Flint, 1968a: 50 [type locality: Dominica, D'leau Gommier; NMNH; ♂]. —Flint 1968a: 81 [checklist]. —Flint 1974b: 76 [♂; distribution]. —Flint and Sykora 1993: 49 [checklist]. —Harris and Tiemann 1993: 292 [♂]. —Botosaneanu 2002b: 85 [checklist]. —Keth et al. 2015: 27 [♂].

Distribution. —Dominica, Suriname.

cruviana Gama Neto & Passos, 2019: 520 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

cuernuda Harris, 1990: 248 [type locality: Venezuela, Territorio Federal Amazonas, Agua Blanca, Cerro de la Neblina; NMNH; ♂].

Distribution. —Venezuela.

damurida Gama Neto & Passos, 2019: 522 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

delgadeza Harris in Harris and Davenport 1992: 458 [type locality: Ecuador, Pastaza, Tzapino; NMNH; ♂]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador.

diabolica Bueno-Soria & Barba-Álvarez, 2018: 365 [type locality: Mexico, Chiapas, Mpio. Ocosingo, Reserva de la Biósfera Montes azules, Est. Biol. Tzendales (embarcadero) Río Tzendales, 16°17'49.09"N, 90°53'06.21"W, 144 m a.s.l.; CNIN; ♂].

Distribution. —Mexico.

didii Santos & Nessimian, 2009a: 763 [type locality: Brazil, Amazonas, Rio Preto da Eva (Tributary to Rio Preto da Eva, 02°38'14.6"S 59°44'09.9"W; INPA; ♂]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil.

dientera Harris, 1990: 251 [type locality: Venezuela, Territorio Federal Amazonas, San Carlos de Río Negro; NMNH; ♂].

Distribution. —Venezuela.

digitata (Mosely, 1937b): 171 [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂; in *Exitrichia*]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Keth et al. 2015: 62 [♂].

Distribution. —Mexico.

dikeros Flint, 1983: 48 [type locality: Argentina, Pcia. Entre Ríos, Arroyo P. Verne, 4 km N Villa San José; NMNH; ♂]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 33 [checklist].

Distribution. —Argentina, Uruguay.

djalmasantosi Santos & Nessimian, 2009a: 759 [type locality: Brazil, Amazonas, Rio Preto da Eva (tributary to Rio Preto da Eva, 02°36'45.5"S 59°43'59.1"W); INPA; ♂]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil.

doppelganger Keth in Keth et al. 2015: 63 [type locality: [United States], Alabama, Marion Co., North Fork Creek at Hwy. 17; PSUC; ♂].

Distribution. —U.S.A.

downsi Ruiter, 1990: 88 [type locality: [United States], Colorado, Jackson County, Ginger Quill Ranch at the North Platte River, altitude 2,370 meters (7,700 feet) above mean sea level; INHS; ♂]. —Keth et al. 2015: 78 [♂].

Distribution. —U.S.A.

dracanamalama Harris in Harris and Rasmussen 2010: 36 [type locality: [United States], Virginia, Middlesex County, Dragon Run Swamp, Rt. 603, 3 mi. S Warner, N37.380, W76.418; NMNH; ♂; ♀]. —Keth et al. 2015: 44 [♂].

Distribution. —U.S.A.

dubitans (Mosely, 1939a): 235 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂; in *Dolotrichia?*]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Dumas et al. 2009: 366 [distribution]. —Dumas and Nessimian 2012: 15 [checklist]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil.

durior Flint, 1983: 49 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NMNH; ♂]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil, Uruguay.

edalis Ross, 1941a: 62 [type locality: [United States], Oklahoma, along Pennington Creek, Reagan; INHS; ♂]. —Ross 1944: 138 [♂; ♀]. —Blickle 1979: 50, 77 [checklist;]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 113 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Bowles et al. 2007: 21 [distribution; biology]. —Keth et al. 2015: 79 [♂]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

elongata Flint, 1983: 53 [type locality: Argentina, Pcia. Salta, Cañada la Gotera, Rt. 59, km 23.5; NMNH; ♂]. —Angrisano 1999: 33 [checklist]. —Muzón et al. 2005: 57 [distribution]. —Rueda Martín 2011: 7 [♂; distribution].

Distribution. —Argentina.

eroga (Mosely, 1937b): [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂; in *Exitrichia*]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Keth et al. 2015: 80 [♂].

Distribution. —Mexico.

ersitis Denning, 1947a: 152 [type locality: [Canada], Saskatchewan, Saskatoon; ESUW; ♂; ♀]. Blickle 1979: 50, 75 [checklist; ♂]. —Keth et al. 2015: 64 [♂].

Distribution. —Canada.

esmalda (Mosely, 1937b): 173 [type locality: Mexico, Chiapas, Esmeralda; NHMUK; ♂; in *Exitrichia*]. —Bueno-Soria and Flint 1978: 202 [distribution]. —Holzenthall 1988: 62 [distribution]. —Maes 1999: 1194 [checklist]. —Bueno-Soria et al. 2005: 75 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Keth et al. 2015: 72 [♂]. —Armitage et al. 2016: 9 [distribution]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Mexico, Nicaragua, Panama.

espinosa Armitage & Harris, 2020a: 5 [type locality: Panama, Coclé Province, Cuenca 134, Omar Torrijos Herrera National Park, Quebrada Las Yayas, PSPSCB-PNGDOTH-C134-2017-004, 8.66168°N, 80.5952°W, 728 m; COZEM; ♂; see Armitage and Harris 2020b errata]. —Armitage and Harris 2020b: 2 [correction to original illustration].

Distribution. —Panama.

exicoma (Mosely, 1937b): 174 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂; in *Exitrichia*]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Keth et al. 2015: 81 [♂].

Distribution. —Mexico.

falca Ross, 1938a: 119 [type locality: [United States], Illinois, Muncie, along Stony Creek; INHS; ♂]. —Ross 1944: 159 [♂; ♀; distribution]. —Blickle 1979: 50, 77 [checklist; ♂]. —Huryn and Foote 1983: 791 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Houghton et al. 2001: 505 [distribution]. —Harris and Rasmussen 2010: 28 [♂; ♀; distribution]. —Armitage et al. 2011: 14 [checklist]. —Keth et al. 2015: 45 [♂].

Distribution. —U.S.A.

falcifera Flint, 1974b: 75 [type locality: Suriname, Nickerie River, Blanche Marie Falls; RMNH; ♂]. —Angrisano 1999: 33 [checklist].

Distribution. —Suriname.

farkoska Oláh & Johanson, 2011: 173 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.935'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

felkurta Oláh & Johanson, 2011: 175 [type locality: French Guiana, Sinnamary, Petit Saut, 05°03.853'N 053°02.814'W, 9 m; NHRS; ♂].

Distribution. —French Guiana.

feolai Santos & Nessimian, 2009a: 766 [type locality: Brazil, Amazonas, Rio Preto da Eva (tributary to Rio Preto da Eva, 02°38'14.6"S 59°44'09.9"W); INPA; ♂]. —Thomson and Holzenthall 2012: 25 [re-description; distribution]. —de Souza et al. 2013: 586 [distribution]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil, Venezuela.

filifera Flint, 1983: 46 [type locality: Uruguay, Dpto. Lavalleja, Río Cebollati, Picada de Rodriguez; NMNH; ♂]. —Harris and Davenport 1992: 461 [re-description]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 33 [checklist]. —Blahnik et al. 2004: 5 [distribution]. —Paprocki et al. 2004: 11 [checklist]. —de Souza et al. 2013: 586 [distribution]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil, Uruguay.

flowersi Harris, 1990: 257 [type locality: Panama, Bocas del Toro Province, Quebrada Canza at pipeline road; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

fogaka Oláh & Johanson, 2011: 176 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.235'N 52°11.988'W, 225 m; NHRS; ♂].

Distribution. —French Guiana.

garra Keth, 2004: 170 [type locality: Belize, Orange Walk District, New River Lagoon, dock area at Lamanai Ruins; NMNH; ♂].

Distribution. —Belize.

garrinichai Santos & Nessimian, 2009a: 764 [type locality: Brazil, Amazonas, Manaus (Igarapé Arumã, tributary to Rio Cuieiras, 02°30'55.2"S 60°15'44.4"W); INPA; ♂]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil.

gilaensis Keth in Keth et al. 2015: 65 [type locality: U.S.A., Arizona, Gila Co., Tonto Fish Hatchery, 34.3400°N 111°0598°W, 1628 m; NMNH; ♂].

Distribution. —U.S.A (Arizona).

gilmari Santos & Nessimian, 2009a: 759 [type locality: Brazil, Amazonas, Rio Preto da Eva (tributary to Rio Urubu, 02°31'01.3"S 59°43'13.7"W); INPA; ♂]. —Paprocki and França 2014: 47 [checklist].

Distribution. —Brazil.

gladia Keth in Keth et al. 2015: 82 [type locality: United States, Arizona, Coco Co., Grand Canyon National Park, mouth of Kansas Creek; INHS; ♂].

Distribution. —U.S.A.

gotera Flint, 1983: 51 [type locality: Argentina, Pcia. Salta, Cañada la Gotera, Rt. 59, km 23.5; NMNH; ♂]. —Flint and Reyes 1991: 487 [♂; distribution]. —Angrisano 1999: 33 [checklist]. —Rueda Martín 2011: 8 [♂; distribution]. —Isa Miranda and Rueda Martí 2014: 199 [distribution].

Distribution. —Argentina, Bolivia, Peru.

grehani Keth, 2015 in Keth, Harris, and Armitage 2015: 83 [type locality: U.S.A., Oregon, Clatsop Co., vicinity of Gronnel Rd. approx, 2 miles E Elsie; CAS; ♂].

Distribution. —U.S.A.

hajla Oláh & Johanson, 2011: 177 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂; ♀].

Distribution. —French Guiana.

halia Denning, 1947a: 153 [type locality: [United States], Wyoming, Bluegrass River, near Wheatland; ESUW; ♂]. —Etnier 1965: 147 [distribution]. —Roy and Harper 1979: 152 [distribution]. —Blickle 1979: 50, 75 [checklist; ♂]. —Houghton et al. 2001: 505 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Keth et al. 2015: 66 [♂]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 118 [checklist].

—*numii* Ross, 1948: 205 [type locality: [United States], Colorado, Lake George, in 11-mile canyon of the South Platte River; INHS; ♂]. —Blickle 1979: 50 [to synonymy].

Distribution. —Canada, U.S.A.

harrisi Bueno-Soria & Barba-Álvarez, 2018: 365 [type locality: Mexico, Chiapas, Reserva de la Biósfera Montes azules, Est. Biol. Chajul, Arroyo José, 16°06'50.05"N, 90°56'02.83"W, 145 m asl; CNIN; ♂].

Distribution. —Mexico.

heleios Flint, 1968b: 38 [type locality: Jamaica, St. Catherine, Bog Walk; MCZ; ♂; ♀]. —Flint 1968a: 81 [checklist]. —Botosaneanu 2002b: 85 [checklist]. —Keth et al. 2015: 96 [♂].

Distribution. —Jamaica.

hiaspa (Mosely, 1937b): 181 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂; in *Lorotrichia*]. —Ross 1944: 154 [to synonymy]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Oláh and Johanson 2011: 179 [checklist]. —Keth et al. 2015: 67 [♂]. —Armitage et al. 2016: 9 [distribution]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Mexico, Nicaragua, Panama.

horgoska Oláh & Johanson, 2011: 179 [type locality: French Guiana, Maripasoula, Lawa River, Gzaan Dayé, 4°01.130'N 54°19.015'W, 74 m; NHRS; ♂].

Distribution. —French Guiana.

interrupta Flint, 1974b: 77 [type locality: Suriname, Lucie River camp, Wilhelmina Mountains; RMNH; ♂].

Distribution. —Suriname.

iridescent Flint, 1964: 51 [type locality: Puerto Rico, Maricao, at fish hatchery; NMNH; ♂; ♀; larva; case]. —Flint 1968b: 37 [♂; ♀; larva; distribution]. —Flint 1968a: 48 [♂; ♀; larva; distribution]. —Botosaneanu 1979: 51 [distribution]. —Malicky 1983c: 264 [distribution]. —Kumanski 1987: 23 [distribution]. —Botosaneanu 1989: 99 [distribution]. —Botosaneanu 1991: 128 [distribution]. —Flint and Sykora 1993: 49 [checklist]. —Botosaneanu 1994a: 43 [distribution]. —Botosaneanu 1995a: 32 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu and Hyslop 1998: 18 [distribution]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 85 [checklist]. —Flint and Sykora 2004: 34 [distribution]. —Botosaneanu and Thomas 2005: 42 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Pérez-Gelabert 2008: 300 [checklist]. —Keth et al. 2015: 97 [♂].

Distribution. —Cuba, Dominica, Dominican Republic, Guadeloupe, Haiti, Jamaica, Martinique, Puerto Rico, St. Lucia.

ismetla Oláh & Johanson, 2011: 180 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.257'N 52°11.920'W; NHRS; ♂].

Distribution. —French Guiana.

jarochita Bueno-Soria, 1999: 114 [type locality: Mexico, Veracruz, Estación de Biología Los Tuxtlas, UNAM, Arroyo del Zoológico; CNIN; ♂]. —Oláh and Johanson 2011: 181 [distribution]. —Keth et al. 2015: 28 [♂]. —Harris and Flint 2016: 14 [♂]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Mexico.

juani Harris & Tiemann, 1993: 286 [type locality: United States, Texas, Comal County, Honey Creek at Honey Creek Nature Preserve; NMNH; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Bowles et al. 2007: 21 [distribution; biology]. —Keth et al. 2015: 29 [♂].

Distribution. —U.S.A.

juntada Harris in Harris and Davenport 1992: 465 [type locality: Peru, Loreto, tributary to Rio Yanomono at Explorama Lodge; NMNH; ♂].

Distribution. —Peru, Venezuela.

kampa Oláh & Johanson, 2011: 182 [type locality: Peru, San Martin Prov., Rio Mayo, 11 km (rd.) E Mayobamba, 6°04.989'S 76°53.065'W; NHRS; ♂].

Distribution. —Peru.

kampoka Oláh & Johanson, 2011: 183 [type locality: Peru, San Martin Prov., Rio Negro, 37 km (rd.) W Moyobamba, near Olmos-Tarapoto rd., 6°00.278'S 77°15.437'W; NHRS; ♂].

Distribution. —Peru.

kehelia Oláh & Johanson, 2011: 184 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

ketaguka Oláh & Johanson, 2011: 186 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

kimi Keth in Keth et al. 2015: 84 [type locality: U.S.A., California, Ventura Co., Matilija Hot Springs; CAS; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

kitae Ross, 1941a: 60 [type locality: [United States], Missouri, Hollister; INHS; ♂; ♀]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 51, 75 [checklist; ♂]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 113 [♂; distribution]. —Keth et al. 2015: 30 [♂].

Distribution. —U.S.A.

kurta Oláh & Johanson, 2011: 187 [type locality: Peru, San Martin Prov., Rio Huallaga tributary, small river passing Chazuta, 6°34.665'S 76°08.209'W; NHRS; ♂].

Distribution. —Peru.

kurtika Oláh & Johanson, 2011: 188 [type locality: French Guiana, Maripasoula, Lawa River, Gzaan Dayé, 4°01.130'N 54°19.015'W, 74 m; NHRS; ♂].

Distribution. —French Guiana.

kurtitva Oláh & Johanson, 2011: 190 [type locality: Peru, San Martin Prov., Rio Huallaga, at Pumarihri Huallaga Lodge, between Juan Guerra and Chazuta, 14 km (rd.) W Chazuta, 6°36.643'S 76°12.555'W; NHRS; ♂].

Distribution. —Peru.

labios Keth in Keth et al. 2015: 98 [type locality: Mexico, Sonora, Rio Arros at Arroyo El Pavo; NMNH; ♂].

Distribution. —Mexico.

lacertina Botosaneanu, 1994a: 43 [type locality: Guadeloupe, River Lézarde, Saut de la Lézarde; ZMUA; ♂]. —Botosaneanu 2000: 256, 259 [♂; ♀; distribution]. —Botosaneanu 2002b: 85 [checklist]. —Botosaneanu and Thomas 2005: 42 [distribution]. —Keth et al. 2015: 68 [♂].

Distribution. —Guadeloupe, Martinique.

lefela Oláh & Johanson, 2011: 191 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

leonensis Keth in Keth et al. 2015: 85 [type locality: Mexico, Nuevo Leon, Municipio de Santiago, Arroyo San Juan on road to Laguna de Sanchez, 3.5 km west of La Cienegra, 25°24'N 100°17'W; PSUC; ♂].

Distribution. —Mexico.

lobata Flint, 1974b: 79 [type locality: Suriname, Lucie River camp, Wilhelmina Mountains; RMNH; ♂].

Distribution. —Suriname.

longissima Flint, 1983: 49 [type locality: Brazil, Edo. Santa Catarina, Nova Teuronia; NMNH; ♂]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 48 [checklist].

Distribution. —Brazil.

lucrecia Angrisano, 1995a: 513 [type locality: Uruguay, Artigas, Potrero Sucio, Ao. Tres Cruces; FHCU; ♂]. —Angrisano 1999: 33 [checklist].

Distribution. —Uruguay.

macuxi Gama Neto & Passos, 2019: 523 [type locality: Brazil, Roraima, Mucajai municipality, RR-325, Vicinal Apiaú, Igarapé Serrinha (Sítio Vaca), 02°33'7.78"N, 61°18'45.06"W, 74 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

makunaima Gama Neto & Passos, 2019: 523 [type locality: Brazil, Roraima, Mucajai municipality, RR-325, Vicinal Apiaú, Igarapé Serrinha (Sítio Vaca), 02°33'7.78"N, 61°18'45.06"W, 74 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

malickyi Harris in Harris and Tiemann 1993: 288 [type locality: Panama, Barro Colorado Island, Lutz; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

manopla Keth in Keth et al. 2015: 46 [type locality: Mexico, Sonora, Cajon Bonito, Losojas Ranch, 31.27854°N 109.00196°W; NMNH; ♂].

Distribution. —Mexico.

margaritena Botosaneanu in Botosaneanu and Vilorio 2002: 106 [type locality: Venezuela, Isla de Margarita, Rio San Juan at fuentidueno; ZMUA; ♂; ♀]. —Botosaneanu 2002b: 85 [checklist].

Distribution. —Venezuela.

maria Bueno-Soria & Hamilton, 1986: 302 [type locality: Mexico, Oaxaca, 7 km NE Huautla de Jimenez; NMNH; ♂]. —Keth 2004: 177 [♂]. —Keth et al. 2015: 31 [♂].

Distribution. —Mexico.

mathisi Keth, 2004: 170 [type locality: Belize, Orange Walk District, New River Lagoon, dock area at Lamanai Ruins; NMNH; ♂].

Distribution. —Belize.

matula Gama Neto & Passos, 2019: 525 [type locality: Brazil, Roraima, Mucajai municipality, RR-325, Vicinal Apiaú, Igarapé Serrinha (Sítio Vaca), 02°33'7.78"N, 61°18'45.06"W, 74 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

maya Harris & Flint, 2016: 3 [type locality: Belize, Stann Creek District, Cockscomb Wildlife Preserve, Cockscomb A, B4, Maya Mountains, 200 m, N16-80, W88-55, subtropic wet forest; NMNH; ♂].

Distribution. —Belize.

mcptheroni Keth in Keth et al. 2015: 86 [type locality: [United States], Texas; PSUC; ♂].

Distribution. —U.S.A.

mentonensis Frazer & Harris, 1991b: 7 [type locality: [United States], Georgia, Chattooga County, Gilreath Creek at Co. Hwy. 234 bridge (34°34'N, 85°27'W); NMNH; ♂]. —Frazer et al. 1991: 20 [distribution]. —Harris and Rasmussen 2010: 40 [♂; ♀; distribution]. —Keth et al. 2015: 47 [♂].

Distribution. —U.S.A.

michaeli Armitage & Harris, 2020a: 5 [type locality: Panama, Coclé Province, Cuenca 134, Omar Torrijos Herrera National Park, Quebrada Las Yayas, PSPSCB-PNGDOTH-C134-2017-004, 8.66168°N, 80.5952°W, 728 m; COZEM; ♂; see Armitage and Harris 2020b errata]. —Armitage and Harris 2020b: 3 [correction to original illustration].

Distribution. —Panama.

minutisimella (Chambers, 1873): 125 [type locality not given; type specimen not designated; ♂; in *Cyllene*, Lepidoptera]. —Milne 1934: 76, 77 [to *Orthotrichia*]. —Ross 1944: 157 [♂; ♀; larva; distribution; designated ♀ allotype; indicated type locality may be [United States], Kentucky, Covington; to *Neotrichia*]. —Denning 1947: 20 [distribution]. —Unzicker et al. 1970: 172 [distribution]. —Resh et al. 1978: 383 [distribution]. —Blickle 1979: 51, 75 [checklist; ♂]. —Harris et al. 1982a: 511 [distribution]. —Waltz and McCafferty 1983a: 10 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Harris et al. 1984: 108 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Harris et al. 1991: 221 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton and Stewart 1996: 113 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 133 [distribution]. —Bowles et al. 2007: 21 [distribution; biology]. —Harris et al. 2012: 8 [checklist]. —Keth et al. 2015: 105 [♂]. —Denson et al. 2016: 5 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Mexico, U.S.A.

- mobilensis*** Harris, 1985a: 252 [type locality: [United States], Alabama, Mobile County, Mobile River at Mt. Vernon, T2N, R1W, S42; NMNH; ♂]. —Harris et al. 1991: 222 [distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Harris and Rasmussen 2010: 26 [♂; ♀; distribution]. —Keth et al. 2015: 48 [♂]. —Harris and Flint 2016: 7 [distribution].
Distribution. —Mexico, U.S.A.
- mojavensis*** Keth in Keth et al. 2015: 49 [type locality: United States, Arizona, Mojave Co., Colorado River at Lake Navasu marina; NMNH; ♂].
Distribution. —U.S.A.
- mucajai*** Gama Neto & Passos, 2020: 184 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].
Distribution. —Brazil.
- napoensis*** Harris in Harris and Davenport 1992: 461 [type locality: Ecuador, Napo, 7 km N Lago Agrio; NMNH; ♂]. —Ríos-Touma et al. 2017: 10 [checklist].
Distribution. —Ecuador.
- negroensis*** Harris, 1990: 254 [type locality: Venezuela, Territorio Federal Amazonas, San Carlos de Río Negro; NMNH; ♂].
Distribution. —Venezuela.
- nesiotes*** Flint & Sykora, 1993: 55 [type locality: Grenada, Parish St. Andrews, Balthazar Estate; FSCA; ♂]. —Botosaneanu and Alkins-Koo 1993: 20 [♂; ♀; distribution]. —Flint 1996b: 100 [distribution]. —Botosaneanu 2002b: 85 [checklist]. —Keth et al. 2015: 50 [♂].
 —*intortigona* Botosaneanu & Sakal, 1992: 202 [*nomen nudum*; distribution; ecology] —Flint et al. 1999a: 104 [to synonymy; as *nesiotes*].
Distribution. —Grenada, Trinidad.
- niltonsantosi*** Santos & Nessimian, 2009a: 762 [type locality: Brazil, Amazonas, Manaus (tributary to Igarapé da Cachoeira, 02°41'45.4"S 60°17'42.7"W); INPA; ♂]. —Paprocki and França 2014: 48 [checklist].
Distribution. —Brazil.
- noteuna*** (Mosely, 1939a): 232 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂; in *Exitrichia*]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 48 [checklist].
Distribution. —Brazil, Uruguay.
- novara*** (Mosely, 1939a): 232 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂; in *Exitrichia*]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Angrisano and Sganga 2007: 40 [♂; distribution]. —Manzo et al. 2014: 166 [distribution]. —Paprocki and França 2014: 48 [checklist].
Distribution. —Argentina, Brazil, Uruguay.
- okopa*** Ross, 1939: 629 [type locality: [United States], Pennsylvania, Athens, along Susquehanna R.; INHS; ♂; ♀]. —Ross 1944: 158 [♂; ♀; distribution]. —Etnier

1965: 147 [distribution]. —Edwards 1973: 506 [distribution]. —Roy and Harper 1975: 1083 [distribution]. —Roy and Harper 1979: 152 [distribution]. —Blickle 1979: 51, 75 [checklist; ♂]. —Roy and Harper 1981: 105 [distribution]. —Hurn and Foote 1983: 791 [distribution; as *okapa*]. —Hamilton et al. 1983: 18 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Harris et al. 1991: 223 [distribution]. —Masteller and Flint 1992: 70 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton and Stewart 1996: 114 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Keth 2003: 169 [♂]. —Pescador et al. 2004: 133 [distribution]. —Bowles et al. 2007: 21 [distribution; biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Armitage et al. 2011: 14 [checklist]. —Keth et al. 2015: 87 [♂]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 118 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, U.S.A.

oldalia Oláh & Johanson, 2011: 192 [type locality: Peru, San Martin Prov., Rio Huallaga, at Pumarihri Huallaga Lodge, between Juan Guerra and Chazuta, 14 km(rd.) W Chazuta, 6°36.643'S 76°12.555'W; NHRS; ♂].

Distribution. —Peru.

olorina (Mosely, 1937b): 175 [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂; in *Exitrichia*]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Blinn and Ruiter 2009a: 305 [biology]. —Keth et al. 2015: 73 [♂].

Distribution. —Mexico, U.S.A.

orejona Harris & Davenport, 1992: 26 [type locality: Peru, Loreto, edge of Rio Sucusari backwater, adjoining Explornapo Camp; NMNH; ♂].

Distribution. —Peru.

orlandoi Santos & Nessimian, 2009a: 761 [type locality: Brazil, Amazonas, Manaus (tributary to Rio Branquinho, 02°31'24.6"S 60°20'05.3"W); INPA; ♂]. —Paprocki and França 2014: 48 [checklist].

Distribution. —Brazil.

osmena Ross, 1944: 278 [type locality: [United States], Utah, Blacksmith Fork Canyon; INHS; ♂]. —Blickle 1979: 51, 75 [checklist; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton 2001: 90 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Bowles et al. 2007: 21 [distribution; biology]. —Keth et al. 2015: 88 [♂].

—*panneus* Denning, 1947a: 154 [type locality: [United States], Wyoming, Bluegrass River, near Wheatland; ESUW; ♂]. —Blickle 1979: 51 [to synonymy].

Distribution. —U.S.A.

ovona (Mosely, 1939a): 233 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; ♂; in *Exitrichia*]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 48 [checklist].

Distribution. —Brazil.

oxima (Mosely, 1937b): 176 [type locality: Mexico, Guerrero, Cocula; NHMUK; ♂; in *Exitrichia*]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Keth et al. 2015: 89 [♂].

Distribution. —Mexico.

palitla Harris & Flint, 2016: 4 [type locality: Mexico, San Luis Potosi, Palitla; NMNH; ♂].

Distribution. —Mexico.

palma Flint, 1982a: 45 [type locality: Argentina, Pcia. Buenos Aires, Río Parana de las Palmas; NMNH; ♂; ♀]. —Flint 1982b: 38 [distribution]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2007: 40 [♂; distribution]. —Moreno et al. 2020: 265 [distribution].

Distribution. —Argentina, Brazil, Paraguay, Uruguay.

pamelae Harris & Armitage, 2015: 5 [type locality: Panama, Chiriquí Province, Cuenca 108, tributary of Quebrada Grande, at waterfall, Boquete, Valle Escondido, 8.78291°N 82.44579°W, 1253 m; MIUP; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Panama.

parabullata Harris & Armitage, 2015: 6 [type locality: Panama, Panama Canal Zone, Cuenca 115, Isla Abogada, 9.19903°N 79.85980°W; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Gama Neto and Passos 2019: 527 [distribution].

Distribution. —Brazil, Panama.

parany Oláh & Johanson, 2011: 193 [type locality: Peru, Amazonas Prov., Rio Utcabamba, Bajra Grande, at Rio Hotel, 5°45.824'S 78°25.414'W; NHRS; ♂].

Distribution. —Peru.

paraokopa Keth in Keth et al. 2015: 90 [type locality: U.S.A., Missouri, Christian Co., Swan Creek at Missouri Rt. DD, approximately 0.8 kilometers; PSUC; ♂].

Distribution. —U.S.A (Missouri).

pelei Santos & Nessimian, 2009a: 766 [type locality: Brazil, Amazonas, Rio Preta da Eva (tributary to Rio Preto da Eva, 02°32'09.4"S 59°49'59.3"W); INPA; ♂]. —Paprocki and França 2014: 48 [checklist].

Distribution. —Brazil.

pequenita Botosaneanu, 1977: 277 [type locality: Cuba, Oriente, Baracoa, Rio Sabanilla; NMNH; ♂]. —Botosaneanu 1979: 51 [distribution]. —Kumanski 1987: 23 [distribution]. —Botosaneanu 1990b: 46 [♂; ♀; distribution]. —Botosaneanu 1991: 128 [distribution]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Botosaneanu and Alkins-Koo 1993: 18 [distribution]. —Flint and Sykora 1993: 49 [checklist]. —Botosaneanu 1994b: 458 [larva]. —Flint 1996a: 16 [checklist]. —Flint 1996b: 101 [distribution]. —Botosaneanu and Hyslop 1998: 18 [distribution]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2002b: 85 [checklist]. —Flint and Sykora 2004: 36 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Pérez-Gelabert 2008: 300 [checklist]. —Keth et al. 2015: 51 [♂].

—*Neotrichia* sp. 1: Kumanski 1987: 23 [♀]. —Flint and Sykora 2004: 36 [to synonymy].

Distribution. —Barbados, Dominican Republic, Cuba, Haiti, Jamaica, Trinidad.
picada Flint, 1983: 53 [type locality: Uruguay, Dpto. Lavalleja, Rio Cebollati, Picada de Rodriguez; NMNH; ♂]. —Angrisano 1995a: 511 [distribution]. —Angrisano 1999: 33 [checklist].

Distribution. —Uruguay.

pierpointorum Armitage & Harris, 2020a: 6 [type locality: Panama, Coclé Province, Cuenca 134, Omar Torrijos Herrera National Park, Quebrada Las Yayas, PSPSCB-PNGDOTH-C134-2017-004, 8.66168°N, 80.5952°W, 728 m; COZEM; ♂].

Distribution. —Panama.

pinarenia Botosaneanu, 1980: 113 [type locality: Cuba, Prov. Pinar del Rio, Arroyo del Pinar de Viñales; ZMUA; ♂]. —Botosaneanu 1979: 51 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 86 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Keth et al. 2015: 32 [♂]

Distribution. —Cuba.

pinnacles Harris & Flint, 2016: 4 [type locality: United States, California, San Benito County, Pinnacles National Monument, Chalone Creek, 1.4 km NW Bear Creek; NMNH; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

proboscidea Flint, 1974b: 73 [type locality: Suriname, Nickerie River, Lombok falls; RMNH; ♂].

Distribution. —Suriname.

pulgara Keth, 2004: 174 [type locality: Belize, Orange Walk District, New River Lagoon, dock area at Lamanai Ruins; NMNH; ♂].

Distribution. —Belize.

quitaunau Gama Neto & Passos, 2020: 185 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

rambala Harris & Armitage, 2019: 13 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91543°N and 82.15527°W; COZEM; ♂].

Distribution. —Panama.

rasmusseni Harris & Keth, 2002: 73 [type locality: [United States], Florida, Suwannee County, Santa Fe River at Hwy. 129; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris and Rasmussen 2010: 32 [♂; ♀; distribution]. —Harris et al. 2012: 8 [checklist]. —Keth et al. 2015: 52 [♂].

Distribution. —U.S.A.

riegeli Ross, 1941a: 61 [type locality: [United States], Illinois, Eddyville, Lusk Creek; INHS; ♂; ♀]. —Ross 1944: 159 [♂; ♀; distribution]. —Blickle 1979: 51, 77 [checklist; ♂]. —Moulton and Stewart 1996: 114 [♂; distribution]. —Etnier 2010: 486 [distribution]. —Harris and Rasmussen 2010: 29 [♂; ♀; distribution]. —Keth et al. 2015: 53 [♂].

Distribution. —U.S.A.

riparia Flint & Reyes, 1991: 486 [type locality: Peru, Dept. La Libertad, Prov. Trujillo, Dist. Simbal, Río Lucumar, Simbal; NMNH; ♂].

Distribution. —Peru.

rotundata Flint, 1974b: 76 [type locality: Suriname, Käyser Airstrip; RMNH; ♂]. —Flint 1991a: 69 [distribution; as near *rotundata*]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 48 [checklist].

Distribution. —Brazil, Suriname.

ruiteri Keth in Keth et al. 2015: 54 [type locality: Mexico, Sonora, Canon Alacran; NMNH; ♂].

Distribution. —Mexico.

sala Angrisano, 1984: 1 [type locality: Argentina, SALTA, Parque Nacional el Rey, río La Sala; MACN; ♂]. —Angrisano 1999: 33 [checklist].

Distribution. —Argentina.

salada Flint, 1982a: 43 [type locality: Argentina, Pcia. Buenos Aires, Rio Salado, Rt. 3, S San Miguel del Monte; NMNH; ♂; ♀]. —Flint 1982b: 39 [distribution]. —Angrisano 1995a: 513 [distribution]. —Angrisano 1999: 33 [checklist].

Distribution. —Argentina, Paraguay, Uruguay.

sandersoni Harris & Flint, 2016: 5 [type locality: United States, Arizona, Coconino County, West Fork Oak Creek, A79-17; NMNH; ♂].

Distribution. —U.S.A.

sandyae Ruiter, 2007: 275 [type locality: USA, Arizona, Cochise County, South Fork Cave Creek; NMNH; ♂]. —Keth et al. 2015: 33 [♂].

Distribution. —U.S.A.

sepulga Harris, 1991: 15 [type locality: [United States], Alabama, Butler County, Duck Creek off Co. Hwy. 7, 3.2 km W Mt. Olive (Sec. 17, T 7 N, R 12 E); NMNH; ♂]. —Harris et al. 1991: 224 [distribution]. —Keth et al. 2015: 99 [♂].

Distribution. —U.S.A.

serrata Harris & Armitage, 2019: 14 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91543°N and 82.15527°W, 120 m; COZEM; ♂].

Distribution. —Panama.

sicilicula Flint, 1983: 51 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NMNH; ♂]. —Angrisano 1995a: 513 [distribution]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 49 [checklist].

Distribution. —Brazil, Uruguay.

sokaga Oláh & Johanson, 2011: 194 [type locality: Peru, San Martin Prov., creek crossing rd. Juan Guerra-Chazuta, 14 km (rd.) E Colombia Bridge, 6°35.594'S 76°13.172'W; NHRS; ♂].

Distribution. —Peru.

soleaferrea Botosaneanu in Botosaneanu and Hyslop 1998: 18 [type locality: Jamaica, St. Elizabeth, Black River in its upper course at Windsor; ZMUA; ♂; ♀]. —Botosaneanu 2002b: 86 [checklist]. —Keth et al. 2015: 100 [♂].

Distribution. —Jamaica.

sonora Ross, 1944: 277 [type locality: [United States], Texas, Neville Spring at foot of Chisos Mountains; INHS; ♂]. —Edwards 1973: 506 [distribution]. —Blickle 1979: 51, 77 [checklist; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Keth et al. 2015: 34 [♂].

Distribution. —U.S.A.

starki Harris & Armitage, 2019: 14 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91543°N and 82.15527°W, 120 m; COZEM; ♂].

Distribution. —Panama.

staufferi Keth in Keth et al. 2015: 91 [type locality: U.S.A., Illinois, White Pines State Park; INHS; ♂].

Distribution. —U.S.A (Illinois).

sucusaria Harris & Davenport, 1992: 458 [type locality: Peru, Loreto, Rio Sucusari just up stream from Explornapo Camp; NMNH; ♂].

Distribution. —Peru.

tatiana Armitage & Harris, 2018a: 7 [type locality: Panama, Chiriquí Province, Cuenca 108, tributary of Quebrada Grande at the waterfall, Valle Escondido, Boquete, 8.78291°N, 82.44579°W, 1253 m; COZEM; ♂]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Panama.

tauricornis Malicky, 1980b: 220 [type locality: Guadeloupe, Bras de David beim Forsthaus, Zufluss des Flusses Goyaves; MPC; ♂]. —Malicky 1983c: 264 [checklist]. —Botosaneanu 1989: 99 [♀; distribution]. —Flint 1991b: 53 [♂; distribution]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Flint and Sykora 1993: 56 [distribution]. —Harris and Tiemann 1993: 288 [♂; distribution]. —Botosaneanu and Alkins-Koo 1993: 21 [distribution]. —Botosaneanu 1994a: 43 [distribution]. —Flint 1996b: 101 [distribution]. —Muñoz-Quesada 2000: 278 [checklist]. —Botosaneanu 2000: 256 [distribution]. —Botosaneanu 2002b: 86 [checklist]. —Botosaneanu and Thomas 2005: 44 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Keth et al. 2015: 35 [♂]. —Armitage and Harris 2018b: 98 [checklist]. —Gama Neto and Passos 2019: 527 [distribution].

Distribution. —Brazil, Colombia, Grenada, Guadeloupe, Martinique, Panama, St. Lucia, Tobago, Trinidad.

tertia (Mosely, 1939a): 235 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NHMUK; in *Exitrichia*; ♂]. —Angrisano 1995a: 513 [distribution]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 49 [checklist].

Distribution. —Brazil, Uruguay.

teutonia Flint, 1983: 49 [type locality: Brazil, Edo. Santa Catarina, Nova Teutonia; NMNH; ♂]. —Angrisano 1999: 33 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 49 [checklist].

Distribution. —Brazil.

tirabuzona Harris & Davenport, 1992: 27 [type locality: Peru, Loreto, edge of Rio Sucusari backwater, adjoining Explornapo Camp; NMNH; ♂].

Distribution. —Peru.

tompa Oláh & Johanson, 2011: 197 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

tubulifera Flint, 1980b: 141 [type locality: Argentina, Pcia. Entre Rios, Salto Grande, Rio Uruguay; NMNH; ♂]. —Flint 1982b: 40 [distribution]. —Angrisano 1995a: 513 [distribution]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2007: 40 [♂; distribution].

Distribution. —Argentina, Uruguay.

tuxtla Bueno-Soria, 1999: 113 [type locality: Mexico, Veracruz, Estación de Biología Los Tuxtlas, UNAM, Arroyo del Zoológico; CNIN; ♂]. —Keth et al. 2015: 69 [♂]. —Armitage et al. 2016: 9 [distribution]. —Razo-González 2018: 32 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Mexico, Panama.

unamas Botosaneanu in Botosaneanu and Alkins-Koo 1993: 22 [type locality: Tobago, Argyll River below Argyll waterfall; ZMUA; ♂]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Flint 1996b: 101 [distribution]. —Botosaneanu 2002b: 86 [checklist]. —Keth et al. 2015: 36 [♂]. —Armitage et al. 2016: 9 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution]. —species A Botosaneanu and Alkins-Koo 1993: 23 [♀]. —Flint 1996b: 101 [distribution; to synonymy].

Distribution. —Panama, Tobago, Trinidad.

unispina Flint, 1974b: 72 [type locality: Suriname, Lucie River camp, Wilhelmina Mountains; RMNH; ♂]. —Flint 1996c: 402 [distribution].

Distribution. —Peru, Suriname.

vavai Santos & Nessimian, 2009a: 763 [type locality: Brazil, Amazonas, Manaus (tributary to Rio Branquinho, 02°31'24.6"S 60°20'05.3"W); INPA; ♂]. —Paprocki and França 2014: 49 [checklist].

Distribution. —Brazil.

vekonyka Oláh & Johanson, 2011: 197 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

vibrans Ross, 1938a: 119 [type locality: [United States], Illinois, Oakwood, along Middle Fork River; INHS; ♂]. —Morse and Bickle 1953: 73 [checklist]. —Etnier 1965: 147 [distribution]. —Unzicker et al. 1970: 172 [distribution; as *Noetrichia vibrans*]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Etnier and Schuster 1979: 17 [distribution]. —Bickle 1979: 51, 77 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Harris et al. 1982a: 511 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Hamilton et al. 1983: 18 [distribution].

- Harris et al. 1984: 109 [distribution]. —Usis and Foote 1989: 84 [distribution].
 —Bowles and Mathis 1989: 239 [distribution]. —Tarter 1990: 239 [checklist].
 —Harris et al. 1991: 225 [distribution]. —Frazer et al. 1991: 20 [distribution].
 —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution].
 —Moulton and Stewart 1996: 115 [♂; distribution]. —Abbott et al. 1997: 44 [distribution].
 —Moulton and Stewart 1997: 350 [checklist]. —Houghton and Stewart 1998: 105 [distribution].
 —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 133 [checklist].
 —Bowles et al. 2007: 21 [distribution; biology]. —Flint et al. 2009: 7 [distribution].
 —Etnier 2010: 486 [distribution]. —Houghton et al. 2011b: 5 [biology]. —Armitage et al. 2011: 14 [checklist].
 —Myers et al. 2011: 108 [distribution]. —Harris et al. 2012: 8 [checklist]. —Wright et al. 2013: 466 [biology; distribution].
 —Keth et al. 2015: 101 [♂]. —Denson et al. 2016: 5 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].
- ranea* Denning, 1947a: 19 [type locality: United States, Florida, Miami; ESUW; ♂].
 —Ross 1948: 205 [to synonymy].
Distribution. —Mexico, U.S.A.
- villa* Oláh & Johanson, 2011: 199 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].
Distribution. —French Guiana.
- vissa* Oláh & Johanson, 2011: 200 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].
Distribution. —Peru.
- vonza* Oláh & Johanson, 2011: 201 [type locality: French Guiana, Maripasoula, Maroni River, Damason campo, Village, 4°35.112'N 54°24.799'W, 38 m; NHRS; ♂].
Distribution. —French Guiana.
- xereuini* Gama Neto & Passos, 2020: 186 [type locality: Brazil, Roraima, Iracema municipality, Vicinal Campos Novos (Fazenda Rancho Fundo), small order stream, 2°21'26.22"N, 61°23'38.98"W, 209 m a.s.l.; MPEG; ♂].
Distribution. —Brazil.
- xicana* (Mosely, 1937b): 178 [type locality: Mexico, Chiapas, Dolores; NHMUK; ♂; in *Dolotrichia*]. —Ross 1944: 154 [to synonymy]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Maes 1999: 1194 [checklist]. —Bueno-Soria et al. 2005: 75 [distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Oláh and Johanson 2011: 202 [distribution]. —Keth et al. 2015: 37 [♂]. —Armitage et al. 2016: 10 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].
Distribution. —Mexico, Nicaragua, Panama.
- yagua* Harris & Davenport, 1992: 463 [type locality: Peru, Loreto, Rio Sucusari just upstream from Explornapo Camp; NMNH; ♂].
Distribution. —Peru.

yanomonoa Harris & Davenport, 1992: 454 [type locality: Peru, Loreto, small tributary to Rio Yanomono at Explorama Lodge; NMNH; ♂].

Distribution. —Peru.

yavesia Bueno-Soria, 2010: 29 [type locality: Mexico, Oaxaca, Santa María de Yavesia, 17°14'04.76"N 96°25'35.06"W, 2058 m; CNIN; ♂]. —Keth et al. 2015: 102 [♂].

Distribution. —Mexico.

yayas Armitage & Harris, 2020a: 7 [type locality: Panama, Coclé Province, Cuenca 134, Omar Torrijos Herrera National Park, Quebrada Las Yayas, PSPSCB-PNGDOTH-C134-2017-004, 8.66168°N, 80.5952°W, 728 m; COZEM; ♂].

Distribution. —Panama.

zagalloi Santos & Nessimian, 2009a: 765 [type locality: Brazil, Amazonas, Rio Preta da Eva (Igarapé Jangada, tributary to Rio Urubu, 02°26'32.5"S 59°32'46.2"W); INPA; ♂]. —Paprocki and França 2014: 49 [checklist].

Distribution. —Brazil.

zitoi Santos & Nessimian, 2009a: 762 [type locality: Brazil, Amazonas, Manaus (Igarapé Arumã, tributary to Rio Cuieiras, 02°30'55.2"S 60°15'44.4"W); INPA; ♂]. —Paprocki and França 2014: 49 [checklist].

Distribution. —Brazil.

Genus *Taraxitrichia* Flint & Harris, 1991

Taraxitrichia Flint & Harris, 1991: 441 [type species: *Taraxitrichia amazonensis* Flint & Harris, 1991, original designation]. —Pes and Hamada 2003: 2 [larva; case; biology; distribution].

Taraxitrichia is a monotypic genus recorded from Brazil and the territory of Amazonas in Venezuela. When trying to identify the original specimens using Marshalls' (1979b) hydroptilid key, Flint and Harris (1991) found that they ended at a couplet that resulted in either *Hydroptila* or *Orthotrichia*, but that the specimens did not fit into either option and instead warranted a new genus. Character states important in diagnosis of the genus include the absence of ocelli, the spur formula (0, 3, 4), and male genitalia sharing similarities with those of *Mayatrichia* (Flint and Harris 1991). The larvae, described by Pes and Hamada (2003), live in freshwater sponges.

amazonensis Flint & Harris, 1991: 411 [type locality: Venezuela, Territorio Federal Amazonas, Rio Cataniapo, 10 km S Puerto Ayacucho; NMNH; ♂; ♀].

Distribution. —Brazil, Venezuela.

Subfamily OCHROTRICHIINAE Marshall, 1979

Ochrotrichiini Marshall, 1979b: 184 [type genus: *Ochrotrichia* Mosely, 1934a].
—Oláh and Johanson 2011: 203 [generic character states].

Ochrotrichiinae is a subfamily containing nine genera with interestingly disparate distributions: seven genera (*Angrisanoia*, *Metrichia*, *Nothotrichia*, *Ochrotrichia*, *Ragatrichia*, and *Rhyacopsyche*) are New World genera found throughout North and Central America, while *Maydenoptila* is found only in Australia and *Caledonotrichia* is endemic to New Caledonia. Only recently the latter two genera were placed within Ochrotrichiinae, after historically being considered incertae sedis within Hydroptilidae, following a character state assessment presented with no statistical analysis (Oláh and Johanson 2011). Marshall (1979b) commented that the group may some day be considered a subgroup of Hydroptilinae, but outlined certain morphological and larval behavioral traits, such as the complex genitalia and the larval detritus-feeding habits, that she considered make it distinct. However, not all members of the subfamily are detritus feeders (Wells 1985b). Larval descriptions have been provided for several genera.

Genus *Angrisanoia* Ozdikmen, 2008

Angrisanoia Özdkimen, 2008: 615 [replacement name, *Paratrichia*, preoccupied, junior homonym of a Diptera genus within Scenopinidae (Kelsey 1969: 320)].
—Oláh and Johanson 2011: 235 [re-description].
Paratrichia Angrisano, 1995a: 507 [type species: *Ochrotrichia* (*Paratrichia*) *cebolati*, original description; monotypy; as subgenus of *Ochrotrichia*]. —Flint et al. 1999a: 106 [as subgenus of *Ochrotrichia*]. —Angrisano 2002: 405 [to genus status]. —Özdikmen 2008: 615 [preoccupied].

The genus *Angrisanoia* currently contains five species recorded from Argentina, French Guiana, Venezuela, and Uruguay. Angrisano (1995a) established the genus under the name *Paratrichia*, as a monotypic subgenus of *Ochrotrichia*, but neglected to explicitly state which morphological features were used to define it. Angrisano (2002) later elevated it to generic status, due to the elevation of the other *Ochrotrichia* subgenera, *Metrichia* and *Ochrotrichia*, by Flint and Bueno (1998). The larvae are unknown.

acuti (Angrisano & Sganga, 2009): 62 [type locality: Argentina, Misiones, Parque Provincial Salto Encantado, Salto Acutí; MACN; ♂; in *Paratrichia*]. —Oláh and Johanson 2011: 236 [to *Angrisanoia*]. —Manzo et al. 2014: 166 [distribution].

Distribution. —Argentina.

agazoka Oláh & Johanson, 2011: 236 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°32.833'N 52°11.452'W, 77 m; NHRS; ♂].

Distribution. —French Guiana.

cebollati (Angrisano, 1995a): 509 [type locality: Uruguay, Lavalleja, río Cebollatí, Picada de Rodriguez; FHCU; ♂ in *Ochrotrichia* (*Paratrichia*)]. —Angrisano 1999: 34 [checklist]. —Angrisano 2002: 405 [to *Paratrichia*]. —Özdikmen 2008: 615 [to *Angrisanoia*]. —Oláh and Johanson 2011: 238 [checklist].

Distribution. —Uruguay.

lemeza Oláh & Johanson, 2011: 238 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

otarosa (Wasmund & Holzenthal, 2007): 17 [type locality: Venezuela, T. F. A. [Amazonas], Camp IV, Cerro d. l. Neblina, 0°58'N 65°57'W, 670 m; NMNH; ♂; in *Rhyacopsyche*]. —Oláh and Johanson 2011: 239 [to *Angrisanoia*].

Distribution. —Venezuela.

Genus *Caledonotrichia* Sykora, 1967

Caledonotrichia Sykora, 1967: 585 [type species: *Caledonotrichia illiesi* Sykora, 1967, original designation]. —Marshall 1979b: 221 [generic review; considered incertae sedis within Hydroptilidae]. —Wells 1995: 229 [larva]. —Harris and Armitage 1997: 127 [placement]. —Holzenthal et al. 2007b: 671 [placement]. —Oláh and Johanson 2011: 203 [diagnosis; placement]. —Wells et al. 2013: 59 [generic review; key to adult males].

Caledonotrichia consists of eleven species occurring in New Caledonia. The male genitalia of this genus are noted as both very distinctive within Hydroptilidae and very difficult to homologize with those of other hydroptilid genera (Sykora 1967; Marshall 1979b). Marshall (1979b) stated that neither the adult nor the larval stage offer any clues regarding placement of the group within Hydroptilidae and left the genus incertae sedis. Based on specimen comparison between genera, Harris and Armitage (1997) placed *Caledonotrichia* in Ochrotrichiinae, while also stating that uniting the group was difficult and that they were still determining synapomorphies. The genus was listed as incertae sedis by Holzenthal et al. (2007b), following a mistake in the Trichoptera World Checklist (Morse 2006). Oláh and Johanson (2011) indicated, in agreement with the conclusions of Harris & Armitage (1997) but offering no further explanation or discussion, that *Caledonotrichia* may belong in Ochrotrichiinae. Larval illustrations of *C. minor*, *C. illiesi*, and *C. sp.* are all available in Wells (1995).

bifida Wells, Johanson, & Mary-Sasal, 2013: 71 [type locality: New Caledonia, Province Sud, Serraméa, forest stream, loc 10 21°37.883'S 165°51.958'E; MNHN; ♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

capensis Wells, Johanson, & Mary-Sasal, 2013: 77 [type locality: New Caledonia, Rivière du Cap, Pont du Cap, ~8 km NW Naindai on Bourail-Poya road; MNHN; ♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

charadra Kelley, 1989: 194 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells et al. 2013: 78 [♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

extensa Kelley, 1989: 195 [type locality: New Caledonia, mountain stream up Boulari River; BPBM; ♂]. —Wells et al. 2013: 79 [♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

illiesi Sykora, 1967: 586 [type locality: New Caledonia, River near Col d'Amieu, 478 m; BPBM; ♂]. —Neboiss 1986: 70 [atlas; ♂]. —Wells 1995: 229 [larva; pupa; distribution]. —Oláh and Johanson 2010a: 37 [distribution]. —Wells et al. 2013: 64 [♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

minor Sykora, 1967: 587 [type locality: New Caledonia, River near Col d'Amieu, 478 m; BPBM; ♂]. —Neboiss 1986: 70 [atlas; ♂]. —Wells 1995: 230 [adult head and thorax; distribution]. —Wells et al. 2013: 74 [♂]. —Johanson and Wells 2019: 92 [checklist].

Distribution. —New Caledonia.

minuta Wells, Johanson, & Mary-Sasal, 2013: 66 [type locality: New Caledonia, approx. 10 km SW of Houailou on Houailou-Bourail road, small fall; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

nyurga Oláh & Johanson, 2010a: 37 [type locality: New Caledonia, Province Sud, W slope Mt. Ningua, Kwe Néco Stream, at Camp Jacob, 3.7 km WNW summit of Mt. Ningua, on Bouloparis-Thio Road, about 50 m upstream road, 21°43.613'S 166°06.567'E, 150 m; MNHN; ♂]. —Wells et al. 2013: 81 [♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

ouinnica Wells, Johanson, & Mary-Sasal, 2013: 72 [type locality: New Caledonia, Province Sud, Mt. Dzumac, source stream of Ouinne River, near crosspoint to mountain track, 22°02.073'S 166°28.460'E; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

sykorai Wells, Johanson, & Mary-Sasal, 2013: 85 [type locality: New Caledonia, Province Sud, stream crossing way to sanatorium 2.3 km E St Laurent, ca. 150 m upstream bridge, 22°04.484'S 166°19.910'E; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

vexilla Wells, Johanson, & Mary-Sasal, 2013: 76 [type locality: New Caledonia, Parc de Rivière Bleu, approx 1 km W Kaori Giant; MNHN; ♂]. —Johanson and Wells 2019: 93 [checklist].

Distribution. —New Caledonia.

Genus *Dibusa* Ross, 1939

Dibusa Ross, 1939: 66 [type species: *Dibusa angata* Ross 1939, original designation].
—Wiggins 1977 [larva]. —Marshall 1979b: 218 [generic review; considered incertae sedis within Hydroptilidae]. —Resh and Houp 1986: 30 [life history].
—Oláh and Johanson 2011: 203 [diagnosis; placement].

The monotypic genus *Dibusa* occurs in the United States, recorded from Arkansas, Kentucky, North Carolina, Oklahoma, and Tennessee. Marshall (1979b) did not place the genus in any of the established hydroptilid subfamilies, but she did comment on the unique form of the male genitalia and made note of similarities between *Dibusa* and the genera *Agraylea* and *Nothotrichia*. Oláh and Johanson (2011) indicated that *Dibusa* may belong in the Ochrotrichiinae. The larva was first described by Wiggins (1977) and a detailed life history and description of the larval association with the red alga *Lemanea australis* were given by Resh and Houp (1986).

angata Ross, 1939: 67 [type locality: [United States], Dillsboro, North Carolina; INHS; ♂]. —Ross 1944: 121 [♂]. —Unzicker et al. 1970: 172 [distribution; as *Dibusia angata*]. —Etnier and Schuster 1979: 17 [distribution]. —Etnier and Schuster 1979: 17 [checklist]. —Blickle 1979: 47, 57 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Waltz and McCafferty 1983a: 9 [distribution]. —Harris et al. 1984: 108 [distribution]. —Resh and Houp 1986: 28 [larva; biology]. —Bowles and Mathis 1989: 238 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Tarter 1990: 239 [checklist]. —Harris et al. 1991: 165 [distribution]. —Frazer et al. 1991: 19 [distribution]. —Masteller and Flint 1992: 239 [checklist]. —Bowles and Mathis 1992: 32 [distribution]. —Sheath et al. 1995: 890 [red algal association]. —Moulton and Stewart 1996: 91 [♂; larva; distribution]. —Etnier 2010: 485 [distribution]. —Biondi 2010: 61 [distribution]. —Armitage et al. 2011: 13 [distribution]. —Bowles et al. 2020: 7 [distribution].

Distribution. —U.S.A.

Genus *Maydenoptila* Neboiss, 1977

Maydenoptila Neboiss, 1977: 44 [type species: *Maydenoptila cuneola* Neboiss, 1977, original designation]. —Wells 1980: 635 [revision; key to males]. —Wells 1985b: 22 [larva; pupa; case; key to cased larvae]. —Wells 1997: 9 [checklist; key to larvae]. —Harris and Armitage 1997: 127 [placement]. —Holzenthall et al. 2007b: 671 [placement]. —Oláh and Johanson 2011: 203 [diagnosis; placement].

The genus *Maydenoptila* consists of eight species occurring in Australia and the island of Tasmania. Placed in the subfamily Ochrotrichiinae by Harris and Armitage (1997), it was later placed as incertae sedis by Holzenthall et al. (2007b). Oláh and Johanson

(2011) indicated, without explanation, that *Maydenoptila* may belong in Ochrotrichiinae. Descriptions of early and mature larval stages of *M. rupina* and of mature larvae of *M. baynesi*, *M. cuneola*, and *M. pseudorupina* were given by Wells (1985b).

antennifera Wells, 1983: 630 [type locality: Australia, New South Wales, Wiangaree State Forest, via Kyogle; NMV; ♂]. —Neboiss 1986: 71 [atlas; ♂].

Distribution. —Australia.

baynesi Wells, 1983: 630 [type locality: Australia, Western Australia, Marrinup Brook on Pinjarra-Dwellingup Road at railway crossing; NMV; ♂]. —Wells 1985b: 24 [larva, case, pupa]. —Neboiss 1986: 72 [atlas; ♂].

Distribution. —Australia.

commista Wells, 1980: 641 [type locality: [Australia] Victoria, Dee River, 2 km NW. of Millgrove; NMV; ♂]. —Neboiss 1986: 72 [atlas; ♂].

Distribution. —Australia.

cuneola Neboiss, 1977: 44 [type locality: [Australia] Tasmania, Wedge River; NMV; ♂; ♀]. —Wells 1980: 637 [♂, ♀; distribution]. —Wells, 1985b: 25 [larva, case, pupa]. —Neboiss 1986: 71 [atlas; ♂; ♀]. —Neboiss 2002: 53 [checklist].

Distribution. —Australia.

explicata Wells, 1980: 639 [type locality: [Australia] Tasmania, Gordon River, 1 km above First Split; NMV; ♂]. —Neboiss 1986: 72 [atlas; ♂]. —Neboiss 2002: 53 [checklist].

Distribution. —Australia.

kurandica Wells, 1980: 641 [type locality: [Australia] Queensland, stream 3 miles E. of Kuranda; NMV; ♂]. —Neboiss 1986: 71 [atlas; ♂].

Distribution. —Australia.

pseudorupina Wells, 1980: 643 [type locality: [Australia] Victoria, Brodribb River, Sardine Creek Track, 39 km N. of Orbost; NMV; ♂; ♀]. —Wells 1985b: 25 [larva, case, biology]. —Neboiss 1986: 73 [atlas; ♂; ♀].

Distribution. —Australia.

rupina Neboiss, 1977: 45 [type locality: [Australia] Tasmania, Guide River Falls nr. Ridgley; NMV; ♂; ♀]. —Wells 1980: 643 [♂, ♀; distribution]. —Wells 1985b: 24 [larva, case, pupa, biology]. —Neboiss 1986: 72 [atlas; ♂; ♀]. —Neboiss 2002: 53 [checklist].

Distribution. —Australia.

Genus *Metrichia* Ross, 1938

Metrichia Ross, 1938b: 9 [type species: *Orthotrichia nigrutta* Banks, 1907b, original designation]. —Flint 1968b: 48 [to status of subgenus in *Ochrotrichia*]. —Bueno-Soria and Flint 1978: 204 [as subgenus of *Ochrotrichia*; catalog; distribution]. —Marshall 1979b: 186 [reviewed as subgenus of *Ochrotrichia*]. —Blickle 1979: 7 [key to species of America north of Mexico]. —Flint 1991b: 54 [key to Antioquian species]. —Wiggins 1996: 92 [returned to full generic status]. —Flint and Bueno

1998: 489 [checklist; bibliography]. —Bueno-Soria 2002: 224 [revision; Mexican species]. —Bueno-Soria and Holzenthal 2003: 174 [key to males of Central American species]. —Angrisano and Sganga 2005: 114 [key to males and larvae of Argentinian species]. —Oláh and Johanson 2011: 203 [re-description]. —Santos et al. 2016b: 1 [integrative taxonomy].

Argentitrichia Jacquemart, 1963b: 339 [type species: *Argentitrichia bulbosa* Jacquemart, 1963b, monotypic]. —Marshall 1979b: 186 [to synonymy].

The genus *Metrichia* consists of 141 species in a Neotropical distribution, recorded from the southwestern United States, throughout Central and South America, and the Greater and Lesser Antilles. *Metrichia* is most closely related to the genus *Ochrotrichia*, in which it was once considered to be a subgenus (Marshall 1979b). Males have characteristic dorsolateral setal brushes on abdominal segments V and VI and internal abdominal sacs (Marshall 1979b). Larvae have been associated and described for *M. nigritta* (Edwards and Arnold 1961; Wiggins 1996) and *M. juana* (Flint 1964).

aberrans (Flint, 1972a): 14 [type locality: Mexico, Veracruz, Fortin de las Flores; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Bueno-Soria 2002: 240 [checklist].

Distribution. —Mexico.

acicula Bueno-Soria & Holzenthal, 2003: 175 [type locality: Costa Rica, Guanacaste, Río Mena, 4.2 km W Santa Cecilia, 11.059°N 85.448°W, 260 m; UMSP; ♂].

Distribution. —Costa Rica.

acuminata Santos, Takiya, & Nessimian, 2016: 8 [type locality: Brazil, Ceará, Ubajara, Parque Nacional de Ubajara, Cachoeira do Gameleira, 03°50'21"S 40°54'23"W, 880 m; CZMA; ♂].

Distribution. —Brazil.

adamsae Flint & Bueno-Soria, 1998: 493 [type locality: Peru, Madre de Dios, Pakitza, 12°7'S 70°58'W; NMNH; ♂].

Distribution. —Peru.

alajuela Bueno-Soria & Holzenthal, 2003: 177 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tributaries, 10.216°N 84.607°W, 980 m; UMSP; ♂].

Distribution. —Costa Rica.

alboma Oláh & Johanson, 2011: 204 [type locality: Peru, San Martín Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

amplitudinis Bueno-Soria & Holzenthal, 2003: 177 [type locality: Costa Rica, Cartago, Reserva Tapantí, Río Grande de Orosí, 9.686°N 83.756°W, 1650 m; UMSP; ♂]. —Armitage et al. 2020: 4 [distribution].

Distribution. —Costa Rica, Panama.

ancora Bueno-Soria & Holzenthal, 2003: 177 [type locality: Costa Rica, Guanacaste, Río Góngora (Sulfur mine), 4 km (air) NE Quebrada Grande, 10.887°N 85.470°W,

590 m; UMSP; ♂]. —Armitage and Harris 2018a: 9 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Costa Rica, Panama.

angulosa Bueno-Soria & Holzenthal, 2003: 179 [type locality: Costa Rica, Puntarenas, Río Cotón in Las Alturas, 8.938°N 82.826°W, 1360 m; UMSP; ♂].

Distribution. —Costa Rica.

anisoforficata Parker & Voshell, 1979: 43 [type locality: [United States], Virginia, Giles Co., Stony Creek between Olean and Interior, 650–670 m; NMNH; ♂]. —Parker and Voshell 1981: 4 [checklist].

Distribution. —U.S.A.

anisoscota (Flint, 1991b): 58 [type locality: Colombia, Dpto. Antioquia, Quebrada La Ayura, Envigado (trap B); ♂; in *Ochrotrichia* (*Metrichia*)]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

anticheirion Thomson & Armitage, 2018: 5 [type locality: Panama, Chiriquí Province, Cuenca 102 (Río Chiriquí Viejo), Quebrada Norte, Mount Totumas Biological Reserve, 8.873613°N, 82.690512°W; COZEM; ♂].

Distribution. —Panama.

araguensis (Flint, 1981): 29 [type locality: Venezuela, Aragua, Dos Riitos, 6 km N Rancho Grande; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)].

Distribution. —Venezuela.

arenifera (Flint, 1980a): 214 [type locality: Peru, Dept. del Cuzco, Rio Vilcanota above P'Isaq; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)].

Distribution. —Peru.

argentinica Schmid, 1958a: 195 [type locality: Argentina, Siambon, Tucuman; depository not designated; ♂]. —Flint 1974a: 87 [as *Ochrotrichia* (*Metrichia*)]. —Flint and Bueno-Soria 1998: 490 [as *Metrichia*]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2005: 116 [larva; distribution]. —Isa Miranda and Rueda Martín 2014: 199 [distribution]. —Ríos-Touma et al. 2017: 10 [distribution].

Distribution. —Argentina, Chile, Ecuador, Peru.

arizonensis (Flint, 1972a): 12 [type locality: U.S.A., Arizona, Santa Cruz Co., Sycamore Canyon, ATascosa Mts.; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Blickle 1979: 50, 59 [checklist; ♂]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution].

Distribution. —Mexico, U.S.A.

avon (Bueno-Soria, 1983b): 82 [type locality: Mexico, Chiapas, Cascada de Misolha, 20 km SE Palenque; CNIN; ♂; in *Ochrotrichia* (*Metrichia*)]. —Bueno-Soria 2002: 240 [checklist]. —Bueno-Soria and Holzenthal 2003: 196 [distribution]. —Bueno-Soria et al. 2007: 75 [distribution]. —Armitage et al. 2016: 8 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 5 [distribution].

—*extragna* Bueno-Soria and Barba-Álvarez, 1999b: 30 [type locality: Mexico, Guerrero, Taxco, Totoapan, río Temascalapa, 8 km NW Ahuehuepan, Rd. 51, 18°22.70'N: 99°39.77'W, 900 m; CNIN; ♂]. —Bueno-Soria 2002: 240 [to synonymy].

Distribution. —Costa Rica, Mexico, Panama.

azul Santos, Takiya, & Nessimian, 2016: 13 [type locality: Brazil, Paraná, Céu Azul, Parque Nacional do Iguaçu, Rio Azul, 25°09'21"S 43°47'4"W, 510 m; DZRJ; ♂].

Distribution. —Brazil.

bidentata (Flint, 1983): 41 [type locality: Argentina, Pcia. Neuquen, 13 km E Quila Quina; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2005: 116 [larva; distribution].

Distribution. —Argentina, Chile.

biungulata (Flint, 1972a): 13 [type locality: Panama, Cerro Campana; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Aguila 1992: 539 [distribution]. —Bueno-Soria and Santiago-Fragoso 2002: 252 [checklist]. —Bueno-Soria and Holzenthal 2003: 196 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Panama.

bola (Flint, 1991b): 58 [type locality: Colombia, Dpto. Antioquia, Quebrada La Cebolla, El Retiro (trap A); NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

bonita Santos, Takiya, & Nessimian, 2016: 15 [type locality: Brazil, Mato Grosso do Sul, Bonito, Rio Formosinho, 21°1'16"S 56°26'47"W, 275 m; DZRJ; ♂].

Distribution. —Brazil.

bostrychion Thomson & Holzenthal, 2012: 23 [type locality: Venezuela, Monagas, Guachero Cave National Park at La Paila waterfall, 10°10.322'N, 63°33.315'W, 1110 m; UMSP; ♂].

Distribution. —Venezuela.

bracui Santos, Takiya, & Nessimian, 2016: 19 [type locality: Brazil, Rio de Janeiro, Angra dos Reis, Rio Bracuí, 23°0'23"S 44°29'15"W, 75 m; DZRJ; ♂].

Distribution. —Brazil.

brevitas Bueno-Soria & Santiago-Fragoso, 2002: 252 [type locality: Panama, Chiriquí, Guadalupe, Arriba, 8°52'26"N 82°33'13"W; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

brocha Thomson & Armitage, 2018: 3 [type locality: Panama, Chiriquí Province, Cuenca 102 (Río Chiriquí Viejo), Quebrada Norte, Mount Totumas Biological Reserve, 8.873613°N, 82.690512°W; COZEM; ♂].

Distribution. —Panama.

bulbosa (Jacquemart, 1963b): 339 [type locality: Argentina, [San Juan], Rio Sasso; IRSNB; ♂; in *Argentitrichia*]. —Mangeaud 1996: 154 [distribution]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2005: 117 [♀; larva; distribution]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina.

cafetalera Botosaneanu, 1980: 110 [type locality: Cuba, Prov., Las Villas, Cafetal Gavina, La Sierrita; ZMUA; ♂]. —Botosaneanu 1979: 49 [distribution]. —Botosaneanu 1995a: 26 [♂; ♀; distribution]. —Flint 1996a: 16 [checklist].

—Botosaneanu 2002b: 84 [checklist]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Flint and Sykora 2004: 32 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Cuba, Dominican Republic.

calla Thomson & Armitage, 2018: 4 [type locality: Panama, Chiriquí Province, Cuenca 102 (Río Chiriquí Viejo), Quebrada Norte, Mount Totumas Biological Reserve, 8.873613°N, 82.690512°W; COZEM; ♂].

Distribution. —Panama.

campana (Flint, 1968a): 62 [type locality: Dominica, D'leau Gommier; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Flint and Sykora 1993: 50 [checklist]. —Botosaneanu 2002b: 84 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Dominica, Guadeloupe.

caraca Santos, Takiya, & Nessimian, 2016: 20 [type locality: Brazil, Minas Gerais, Catas Altas, RPPN Santuário do Caraça, Ribeirão, Caraça; DZRJ; ♂].

Distribution. —Brazil.

carbetina (Botosaneanu, 1994a): 38 [type locality: Guadeloupe, Chute du Carbet, 580 m; ZMUA; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu 2002b: 84 [checklist]. —Botosaneanu and Thomas 2005: 40 [distribution].

Distribution. —Guadeloupe, Martinique.

ceer (Flint, 1992a): 387 [type locality: Puerto Rico, El Verde Field Station, Quebrada Prieta; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu 2002b: 84 [checklist].

Distribution. —Puerto Rico.

circulatrix Bueno-Soria, 2002: 224 [type locality: Mexico, Tabasco, Municipio de Huimanguillo, Arroyo las Flores, Villa de Guadalupe, 2a sección Los Chimalapas, km 5+920, Ruta Malpasito-Carlos A. Madrazo, 17°22'05"N 93°36'25"W; CNIN; ♂].

Distribution. —Mexico.

circuliforme Santos, Takiya, & Nessimian, 2016: 22 [type locality: Brazil, Rio de Janeiro, Itatiaia, Rio das Pedras, Cchoeira de Deus, 22°25'0"S 44°32'50"W, 689 m; DZRJ; ♂].

Distribution. —Brazil.

continentalis (Flint, 1972a): 14 [type locality: Panama, Canal Zone, Barro Colorado Island; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Aguila 1992: 539 [distribution]. —Bueno-Soria and Santiago-Fragoso 2002: 252 [checklist]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Panama.

corazones Armitage & Harris, 2020a: 4 [type locality: Panama, Coclé Province, Cuenca 105, Omar Torrijos Herrera National Park, Quebrada Corazones, PSPSCB-PNGDOT-H-C103-2017-001, 8.6776°N, 80.6001°W, 728 m; COZEM; ♂].

Distribution. —Panama.

crenula Bueno-Soria, 2002: 227 [type locality: Mexico, Morelos, Huautla Estación CEAMISH, 2.5 km N 4 km W, 18°27.871'N 99°02.475'W, 940 m; CNIN; ♂].

Distribution. —Mexico.

cuenca (Harper & Turcotte, 1985): 139 [type locality: Ecuador, small stream outlet of Laguna Verde Cocha, near junction with Rio Matadeto, Chirimachay, Quinuas Valley; UMQ; ♂ in *Ochrotrichia* (*Metrichia*)]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador.

cuniapiru Angrisano, 2005 in Angrisano and Sganga 2005: 114 [type locality: Argentina, Misiones, Cuñá Pirú Provincial Park, Cuñá Pirú Stream; MLPA; ♂; ♀].

Distribution. —Argentina.

curta Santos, Takiya, & Nessimian, 2016: 24 [type locality: Brazil, Rio de Janeiro, Itatiaia, Rio das Pedras, 22°24'33"S 44°33'08"W; DZRJ; ♂].

Distribution. —Brazil.

cuspidata (Flint, 1991b): 57 [type locality: Colombia, Dpto. Antioquia, 10 km E Medellin, road to Pas Palmas; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Muñoz-Quesada 2000: 278 [checklist]. —Oláh and Johanson 2011: 205 [distribution].

Distribution. —Colombia, Mexico.

decora Bueno-Soria & Holzenthal, 2003: 179 [type locality: Costa Rica, Heredia, Río Sarapiquí, 7 km W Puerto Viejo, 10.452°N 84.067°W, 50 m; UMSP; ♂].

Distribution. —Costa Rica.

difusa Bueno-Soria & Santiago-Fragoso, 2002: 246 [type locality: Panama, Barro Colorado, Island Snyder Molino Makers 3; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

diosa Flint & Bueno-Soria, 1998: 491 [type locality: Peru, Madre de Dios, Pakitza, 12°7'S 70°58'W; NMNH; ♂].

Distribution. —Peru.

disparilis (Flint, 1983): 41 [type locality: Argentina, Pcia. Tucuman, Rt. 307, 33.7 km W Acheral; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2005: 119 [larva; distribution]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina.

eltera Oláh & Johanson, 2011: 205 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

enigmatica Bueno-Soria & Santiago-Fragoso, 2002: 249 [type locality: Panama, San Blas, Río Carti Grande, 2 km W Nusagandi; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

espera Botosaneanu, 1977: 265 [type locality: Cuba, Pinar del Rio, Soroa, Rio Manantiales; NMNH; ♂]. —Botosaneanu 1979: 49 [distribution]. —Botosaneanu 1980: 111 [♀]. —Flint, 1996a: 16 [checklist]. —Botosaneanu 2002b: 84 [checklist]. Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

excisa (Kumanski, 1987): 20 [type locality: Cuba, Province Las Villas, Sierra de Trinidad, small torrent on road Trinidad-Topes de Colantes; SOFM; ♂; ♀; in *Ochrotrichia* (*Metrichia*)]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 84 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

exclamationis (Flint, 1968a): 64 [type locality: Dominica, Clarke Hall, cocoa trail; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Flint and Sykora 1993: 50 [checklist]. —Botosaneanu 1994a: 38 [distribution]. —Botosaneanu 2002b: 84 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Dominica, Guadeloupe.

extragma Bueno-Soria & Barba-Álvarez, 1999b: 30 [type locality: Mexico, Guerrero, Taxco, Totoapan, río Temascalapa, 8 km NW Ahuehuepan, Rd. 51, 18°22.70'N 99°39.77'W, 900 m; CNIN; ♂]. —Bueno-Soria 2002: 240 [checklist].

Distribution. —Mexico.

farofa Santos, Takiya, & Nessimian, 2016: 24 [type locality: Brazil, Minas Gerais, Jaboticatubas, Parque Nacional da Serra do Cipó, Cachoeira da Farofa, 19°22'47"S 43°34'36"W, 811 m; DZRJ; ♂].

Distribution. —Brazil.

favus (Botosaneanu) in Botosaneanu and Alkins-Koo 1993: 18 [type locality: Trinidad, two 1st order streams, La Laja catchment of Rio Guanapo; ZMUA; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Flint 1996b: 96 [distribution]. —Botosaneanu 2002b: 84 [checklist].

Distribution. —Trinidad.

florecita Bueno-Soria, 2002: 228 [type locality: Mexico, Tabasco, Municipio de Huimanguillo Ejido, Villa de Guadalupe, 1a sección, Cascada Cerro de Las Flores, 17°21'39"N 93°37'29"W, Rta. Malpasito-Carlos A. Madrazo; CNIN; ♂].

Distribution. —Mexico.

fontismoreau (Botosaneanu, 1991): 125 [type locality: Haiti, Departement du Sud, pres de Camp Perrin, Resurgence du Moreau; ZMUA; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu 1995a: 27 [♀; distribution]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Flint and Sykora 2004: 32 [distribution]. —Pérez-Gelabert 2008, 300 [checklist].

Distribution. —Dominican Republic, Haiti.

forceps Santos, Takiya, & Nessimian, 2016: 27 [type locality: Brazil, Paraná, Céu Azul, Parque Nacional do Iguaçu, Rio Azul, 25°09'21"S 53°47'44"W, 510 m; DZRJ; ♂].

Distribution. —Brazil.

formosinha Santos, Takiya, & Nessimian, 2016: 28 [type locality: Brazil, Mato Grosso do Sul, Bonito, Rio Formosinho, 21°10'16"S 56°26'46"W, 275 m; DZRJ; ♂].

Distribution. —Brazil.

fugga Oláh & Johanson, 2011: 207 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

geminata (Flint, 1996b): 96 [type locality: Trinidad, streamlet, Lalaja Rd., 520 m, 10°43'N 61°17'W; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu 2002b: 85 [checklist].

Distribution. —Tobago, Trinidad.

goiana Santos, Takiya, & Nessimian, 2016: 30 [type locality: Brazil, Goiás, Alto Paraíso de Goiás, Rio Bartolomeu tributary, 14°07'25"S 47°30'30"W, 1165 m; DZRJ; ♂].

Distribution. —Brazil.

gomboska Oláh & Johanson, 2011: 208 [type locality: Peru, Huanuco, Tomayquichua Distr. River Tomayquichua, humid subtropical forest, 10°04'27"S 76°12'36"W, 2041 m; NHRS; ♂].

Distribution. —Peru.

gordita Bueno-Soria & Holzenthal, 2003: 183 [type locality: Costa Rica, Puntarenas, Río Singri, ca. 2 km (air) S Finca Helechales, 9.057°N 83.082°W, 720 m; UMSP; ♂].

Distribution. —Costa Rica.

haranga Oláh & Johanson, 2011: 210 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

helenae Flint & Bueno-Soria, 1998: 495 [type locality: Peru, Madre de Dios, Pakitza, 12°7'S 70°58'W; NMNH; ♂].

Distribution. —Peru.

itabaiana Santos, Takiya, & Nessimian, 2016: 32 [type locality: Brazil, Sergipe, Areia Branca, Parque Nacional da Serra de Itabaiana, Rio dos Negros, 10°44'51"S 37°20'24"W, 208 m; DZRJ; ♂].

Distribution. —Brazil.

jorobada Bueno-Soria, 2002: 228 [type locality: Mexico, Tabasco, Municipio de Huimanguillo, Arroyo las Flores, Villade Guadalupe, 2a sección Los Chimalapas, km 5+920, Ruta Malpasito-Carlos A. Madrazo, 17°22'05"N 93°36'25"W; CNIN; ♂].

Distribution. —Mexico.

juana (Flint, 1964): 60 [type locality: Puerto Rico, Toro Negro Forest, Dona Juana Creek; NMNH; ♂; ♀; larva; in *Ochrotrichia* (*Metrichia*)]. —Flint 1968a: 82 [checklist]. —Botosaneanu 2002b: 85 [checklist].

Distribution. —Puerto Rico.

kocka Oláh & Johanson, 2011: 212 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

kumanskii jamaicae Botosaneanu in Botosaneanu and Hyslop 1998: 13 [type locality: Jamaica, Buff Bay River in Green Hill at “Regale”, Blue Mountains, Portland; ZMUA; ♂]. —Botosaneanu 2002b: 85 [checklist].

Distribution. —Jamaica.

kumanskii kumanskii (Botosaneanu, 1991): 128 [type locality: Haiti, Departement de l'Quest, Ville Bonheur, Le Saut d'Eau; ZMUA; ♂; in *Ochrotrichia* (*Metrichia*)]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2002b: 85

[checklist]. —Flint and Sykora 2004: 33 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic, Haiti.

lacuna (Bueno-Soria, 1983b): 79 [type locality: Mexico, Chiapas, Cascada de Misolha, 20 km SE Palenque; CNIN; ♂; in *Ochrotrichia* (*Metrichia*)]. —Bueno-Soria 2002: 240 [checklist]. —Bueno-Soria and Barba-Álvarez 2011: 357 [checklist].

Distribution. —Mexico.

lemniscata (Flint, 1972a): 14 [type locality: Panama, Chiriqui, David, Rovira; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Aguila 1992: 539 [distribution]. —Bueno-Soria and Santiago-Fragoso 2002: 252 [checklist]. —Bueno-Soria and Holzenthal 2003: 196 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2016: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Costa Rica, Panama.

lenophora (Flint, 1991b): 54 [type locality: Colombia, Dpto. Antioquia, 10 km E. Medellin, road to Guarne; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

longiphallata Mey & Ospina-Torres, 2018: 30 [type locality: Colombia, Bogotá, Chapinero, Quebrada La Vieja; ICN; ♂].

Distribution. —Colombia.

longispina Flint & Sykora, 2004: 33 [type locality: Dominican Republic, [La Vega Province], Convento, 12 km S Constanza; NMNH; ♂; ♀]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic.

longissima Santos, Takiya, & Nessimian, 2016: 34 [type locality: Brazil, Rio de Janeiro, Itatiaia, Rio Palmital, 22°25'34"S 44°32'52"W, 637 m; DZRJ; ♂].

Distribution. —Brazil.

longitudinis Bueno-Soria, 2002: 231 [type locality: Mexico, Tabasco, Municipio de Huimanguillo Ejido Villa de Guadalupe, 1a sección, Cascada Cerro de Las Flores, 17°21'39"N 93°37'29"W, Rta. Malpasito-Carlos A. Madrazo; CNIN; ♂].

Distribution. —Mexico.

luna Bueno-Soria & Holzenthal, 2003: 183 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs., 10.216°N 84.607°W, 980 m; UMSP; ♂].

Distribution. —Costa Rica.

macdonaldi Harris & Armitage, 2019: 10 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

macrophallata (Flint, 1991b): 57 [type locality: Colombia, Dpto. Antioquia Quebrada Honda, Marsella, 12 km SW Fredonia; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Muñoz-Quesada 2000: 278 [checklist]. —Armitage and Harris 2020a: 8 [distribution].

Distribution. —Colombia, Panama.

madicola (Botosaneanu, 1994a): 39 [type locality: Guadeloupe, Chute du Carpet, 580 m; ZMUA; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu 2002b: 85 [checklist]. —Botosaneanu and Thomas 2005: 40 [distribution].

Distribution. —Guadeloupe, Martinique.

madre Flint & Bueno-Soria, 1998: 493 [type locality: Peru, Madre de Dios, Pakitza, 12°7'S 70°58'W; NMNH; ♂].

Distribution. —Peru.

magna Bueno-Soria & Holzenthal, 2003: 185 [type locality: Costa Rica, Puntarenas, roadside seep, route 2, just W km 234, 8.976°N 83.299°W, 100 m; UMSP; ♂].

Distribution. —Costa Rica.

malada (Flint, 1991b): 55 [type locality: Colombia, Dpto. Antioquia, Quebrada Agua Mala, 34 km NW Medellin, road to San Jeronimo; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Flint and Reyes 1991: 487 [distribution]. —Muñoz-Quesada 200: 278 [checklist].

Distribution. —Colombia, Peru.

mastelleri Harris & Flint, 2016: 6 [type locality: United States, Arizona, Yavapai County, Fossil Creek, 7.5 km (air) NW Strawberry, N34°25.4', W111°34.4'; NMNH; ♂].

Distribution. —U.S.A.

mechuda Bueno-Soria & Holzenthal, 2003: 185 [type locality: Costa Rica, San José, Río Savegra, ca. San Gerardo de Dota, 9.33°N 83.48°W, 2200 m; CMNH; ♂].

Distribution. —Costa Rica.

meta Bueno-Soria & Holzenthal, 2003: 185 [type locality: Costa Rica, Guanacaste, Parque Bacional Rincón de la Vieja, Quebrada Zopilote, 10.765°N 85.309°W, 785 m; UMSP; ♂].

Distribution. —Costa Rica.

minera Bueno-Soria, 2002: 231 [type locality: Mexico, Veracruz, Las Minas; CNIN; ♂].

Distribution. —Mexico.

munieca Botosaneanu, 1977: 264 [type locality: Cuba, Oriente, Gran Piedra, Arroyos de la Idalia; NMNH; ♂]. —Botosaneanu 1979: 49 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 85 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

necopina Botosaneanu & Thomas, 2005: 40 [type locality: Martinique, Riv Lezarde au départ de la route forestiere de Palourde, 250 m; ZMUA; ♂].

Distribution. —Martinique.

neotropicalis Schmid, 1958a: 195 [type locality: Argentine, Siamba, Tucuman; NMNH; ♂]. —Flint 1967a: 56 [distribution; misidentified as *M. argentinica* according to Angrisano and Sganga 2005: 119]. —Flint 1974a: 88 [checklist]. —Flint 1980a: 216 [correction of switched captions in Schmid 1958a]. —Flint 1990: 118 [distribution]. —Mangeaud 1996: 154 [distribution]. —Vallania et al. 1998: 8 [distribution]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2005: 117 [♀; larva; pupa; distribution]. —Muzón et al. 2005: 57 [distribution].

—Miserendino and Brand 2007: 312 [biology]. —Scheibler and Debandi 2008: 151 [distribution]. —Brand and Miserendino 2011a: 35 [biology]. —Brand and Miserendino 2011b: 143 [biology]. —Brand and Miserendino 2014: 6 [community ecology]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina, Chile, Peru.

nigritta (Banks, 1907b): 163 [type locality: United States, Texas, Austin; MCZ; ♂; in *Orthotrichia*]. —Banks 1907a: 50 [catalogue]. —Ross 1938b: 9 [type species of *Metrichia*; lectotype designated; ♂]. —Ross 1944: 121 [♂]. —Edwards and Arnold 1961: 411 [larva]. —Flint 1968b: 48 [in *Ochrotrichia* (*Metrichia*)]. —Flint 1972a: 12 [♂; distribution]. —Edwards 1973: 506 [distribution]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Blickle 1979: 50, 59 [checklist; ♂]. —Bowles and Mathis 1992: 32 [distribution; in *Ochrotrichia*]. —Moulton et al. 1994: 165 [distribution]. —Wiggins 1996: 92 [larva]. —Moulton and Stewart 1996: 110 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Bueno-Soria 2002: 240 [checklist]. —Bueno-Soria and Santiago-Fragoso 2002: 252 [distribution]. —Rojas-Ascencio et al. 2002: 377 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; bioogy]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Oláh and Johanson 2011: 212 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

—*volada* Blickle & Denning, 1977: 295 [type locality: United States, Arizona, Page Springs Fish Hatchery; DPC; ♂; ♀]. —Blickle 1979: 50, 59 [checklist; ♂]. —Moulton et al. 1994: 165 [to synonymy].

Distribution. —El Salvador, Mexico, Panama, U.S.A.

nowaczyki Harris & Armitage, 2015: 8 [type locality: Panama, Chiriquí Province, Cuenca 108, Quebrada Grande, Boquete, Valle Escondido, below Sabor Restaurant, 8.7790°N 82.44016°W, 1122 m; MIUP; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Panama.

pakitza Flint & Bueno-Soria, 1998: 491 [type locality: Peru, Madre de Dios, Pakitza, 12°7'S 70°58'W; NMNH; ♂].

Distribution. —Peru.

palida Bueno-Soria & Santiago-Fragoso, 2002: 249 [type locality: Panama, Chiriqui, Guadalupe, Arriba, 8°52'26"N 82°33'13"W; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

patagonica (Flint, 1983): 41 [type locality: Argentina, Pcia. Rio Negro, 5 km 5 Rio Villegas; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Mangeaud 1996: 154 [distribution]. —Angrisano 1999: 33 [checklist]. —Angrisano and Sganga 2005: 121 [♀; larva; case; distribution]. —Brand and Miserendino 2011a: 35 [biology].

—Brand and Miserendino 2011b: 143 [biology]. —Oláh and Johanson 2011: 213 [distribution]. —Brand and Miserendino 2014: 6 [community ecology]. —Ríos-Touma et al. 2017: 10 [distribution].

Distribution. —Argentina, Chile, Ecuador, Peru.

peluda Santos, Takiya, & Nessimian, 2016: 35 [type locality: Brazil, Rio de Janeiro, Itatiaia, 1st order tributary of Rio Palmital, 22°25'40"S 44°32'46"W, 584 m; DZRJ; ♂].

Distribution. —Brazil.

penicillata (Flint, 1972a): 13 [type locality: Guatemala, Escuintla, Grutas de San Pedro Martir; ♂; in *Ochrotrichia* (*Metrichia*)]. —Bueno-Soria 2002: 240 [checklist]. —Bueno-Soria and Santiago-Fragoso 2002: 253 [distribution]. —Bueno-Soria and Holzenthal 2003: 196 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [checklist]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Guatemala, Nicaragua, Panama.

pernambucana de Souza & Santos in de Souza et al. 2013: 584 [type locality: Brazil, Pernambuco State, Tamandaré, Reserva de Biológica de Saltinho, Riacho Mamucabas, 35°11;14.0: W, 08°43;21.6: S; DZRJ; ♂]. —Paprocki and França 2014: 46 [checklist].

Distribution. —Brazil.

picuda Bueno-Soria & Holzenthal, 2003: 187 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs., 10.216°N 84.607°W, 980 m; UMSP; ♂]. —Armitage et al. 2016: 8 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Panama.

pitu Angrisano & Sganga, 2009: 60 [type locality: Argentina, Misiones, Departamento de Cainguás, Parque Provincial Salto Encantado; MACN; ♂].

Distribution. —Argentina.

platigona (Botosaneanu) in Botosaneanu and Alkins-Koo 1993: 18 [type locality: Tobago, Argyll River below Argyll waterfall; ZMUA; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology]. —Flint 1996b: 95 [distribution]. —Botosaneanu 2002b: 85 [checklist].

Distribution. —Tobago, Trinidad, Venezuela.

potosina Bueno-Soria, 2002: 232 [type locality: Mexico, San Luis Potosí, La Cascada del Tamasopo; NMNH; ♂].

Distribution. —Mexico.

prolata Bueno-Soria & Holzenthal, 2003: 187 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs., 10.216°N 84.607°W, 980 m; UMSP; ♂].

Distribution. —Costa Rica.

prolixa Bueno-Soria, 2002: 233 [type locality: Mexico, Tabasco, Mpio. Huimanguillo, Villa de Guadalupe, 2ª sección los Chimalapas, km 5.92, Rta. Malpasito-Carlos A. Madraz, 17°22'05"N 93°36'25"W, 335 m; CNIN; ♂].

Distribution. —Mexico.

protrudens (Flint, 1991b): 57 [type locality: Colombia, Dpto. Antioquia, 12 km N Fredonia, road to Medellín; NMNH; ♂; in *Ochrotrichia (Metrichia)*]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

pseudopatagonica Bueno-Soria & Holzenthal, 2003: 187 [type locality: Costa Rica, Limón, E.A.R.T.H., forest reserve arroyo, 7.5 km (air) NW Pocora, 10.23°N, 83.56°W, 10 m; UMSP; ♂]. —Bueno-Soria and Santiago-Fragoso 2002: 253 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 195 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Panama.

quadrata (Flint, 1972a): 14 [type locality: Mexico, Veracruz, Rio Jamapa, north of Coscomatepec; NMNH; ♂; in *Ochrotrichia (Metrichia)*]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Bueno-Soria 2002: 241 [checklist]. —Bueno-Soria and Holzenthal 2003: 196 [distribution].

Distribution. —Costa Rica, Mexico.

rafaeli Santos, Takiya, & Nessimian, 2016: 37 [type locality: Brazil, Ceará, Ubajara, Parque Nacional de Ubajara, Rio das Minas, 03°50'03"S 40°54'18"W, 524 m; DZRJ; ♂].

Distribution. —Brazil.

rawlinsi (Flint & Sykora, 1993): 58 [type locality: Dominica, Parish St. Paul, Springfield Estate; CMNH; ♂; in *Ochrotrichia (Metrichia)*]. —Botosaneanu 2002b: 85 [checklist]. —Botosaneanu and Thomas 2005: 42 [distribution].

Distribution. —Dominica, Martinique.

riva (Bueno-Soria, 1983b): 79 [type locality: Mexico, Chiapas, Cascada de Misolha, 20 km SE Palenque; CNIN; ♂; in *Ochrotrichia (Metrichia)*]. —Bueno-Soria 2002: 241 [checklist]. —Bueno-Soria and Holzenthal 2003: 196 [distribution]. —Bueno-Soria et al. 2005: 75 [distribution]. —Bueno-Soria and Barba-Álvarez 2011: 357 [checklist].

Distribution. —Costa Rica, Mexico.

rona (Flint, 1991b): 55 [type locality: Colombia, Dpto. Antioquia, 7 km E. San Jerónimo; NMNH; ♂; in *Ochrotrichia (Metrichia)*]. —Muñoz-Quesada 2000: 278 [checklist].

Distribution. —Colombia.

sacculifera (Flint, 1991b): 55 [type locality: Colombia, Dpto. Antioquia, Quebrada Honda, Marsella, 12 km SW Fredonia; NMNH; ♂; in *Ochrotrichia (Metrichia)*]. —Muñoz-Quesada 2000: 278 [checklist]. —Armitage et al. 2016: 8 [distribution]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 5, 20 [distribution; ♂].

Distribution. —Colombia, Panama.

- savegra* Bueno-Soria & Holzenthal, 2003: 191 [type locality: Costa Rica, San José, Río Savegra, ca. Sasn Gerardo de Dota, 9.33°N 83.48°W, 2200 m; CMNH; ♂]. —Armitage et al. 2016: 8 [distribution]. —Armitage and Harris 2018b: 97 [checklist].
Distribution. —Costa Rica, Panama.
- sencilla* Harris & Armitage, 2015: 8 [type locality: Panama, Chiriquí Province, Cuenca 108, Quebrada Grande, Boquete, Valle Escondido, below Sabor Restaurant, 8.77970°N 82.44016°W, 1122 m; MIUP; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 196 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].
Distribution. —Panama.
- separata* Bueno-Soria & Holzenthal, 2003: 191 [type locality: Costa Rica, Alajuela, Río Agrio, ca. 3.5 km NE Bajos del Toro, 10.243°N 84.279°W, 1290 m; UMSP; ♂]. —Armitage et al. 2016: 9 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].
Distribution. —Costa Rica, Panama.
- sesquipedalis* Bueno-Soria & Holzenthal, 2003: 191 [type locality: Costa Rica, San Jose, Río Savegra ca. San Gerardode Dota, 9.33°N 83.48°W, 200 m; CMNH; ♂]. —Bueno-Soria and Santiago-Fragoso 2002: 253 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 196 [checklist]. —Armitage and Harris 2018b: 98 [checklist].
Distribution. —Costa Rica, Panama.
- similis* (Flint, 1968a): 62 [type locality: Dominica, Boiling Lake; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Flint and Sykora 1993: 50 [checklist]. —Botosaneanu 2002b: 85 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].
Distribution. —Dominica, Guadeloupe.
- simples* Santos, Takiya, & Nessimian, 2016: 38 [type locality: Brazil, Paraná, Céu Azul, Parque Nacional do Iguaçu, Rio Azul, 25°09'21"S 53°47'44"W, 510 m; DZRJ; ♂].
Distribution. —Brazil.
- sonora* Bueno-Soria, 2002: 236 [type locality: Mexico, Sonora, Cajón Bonito, 38 miles E de A. P. Waters Falls; CAS; ♂].
Distribution. —Mexico.
- spica* Bueno-Soria & Holzenthal, 2003: 195 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs., 10.216°N 84.607°W, 980 m; UMSP; ♂]. —Armitage et al. 2016: 9 [distribution]. —Ríos-Touma et al. 2017: 10 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].
Distribution. —Costa Rica, Ecuador, Panama.
- squamigera* (Flint, 1992a): 385 [type locality: Puerto Rico, El Verde Field Station, Quebrada Prieta; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Botosaneanu 2002b: 85 [checklist]. —Flint and Sykora 2004: 33 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].
Distribution. —Dominican Republic, Puerto Rico.

talhada Santos, Takiya, & Nessimian [type locality: Brazil, Alagoas Quebrangulo, Reserva Biológica de Pedra Talhada, Rio Caranguejo, 09°15'26"S 36°25'08"W, 550 m; DZRJ; ♂].

Distribution. —Brazil.

temascalapensis Bueno-Soria & Barba-Álvarez, 1999b: 30 [type locality: Mexico, Guerrero, Taxco, Teucisapan, río Temascalapa, 12 km NW Ahuehuepan, Rd. 51, 18°25.26'N 99°42.5'W, 1052 m; CNIN; ♂]. —Bueno-Soria 2002: 241 [checklist].

Distribution. —Mexico.

tere Santos, Takiya, & Nessimian, 2016: 42 [type locality: Brazil, Rio de Janeiro, Teresópolis, Parque Nacional da Serra dos Órgãos, Rio Paquequer, 22°27'25"S 42°59'52"W, 1100 m; DZRJ; ♂].

Distribution. —Brazil.

thirysae Jacquemart, 1980a: 303 [type locality: Chile, Arica, Vallee d'Azapa, Quebrada Azapa; IRSNB; ♂]. —Flint 1990: 117 [re-description; ♂]. —Angrisano 1999: 33 [checklist].

Distribution. —Chile.

thomsonae Harris & Armitage, 2019: 10 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

thurmani Harris & Armitage, 2019: 11 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂]. —Armitage and Harris 2020a: 8 [distribution].

Distribution. —Panama.

trebeki Harris & Armitage, 2019: 12 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

triangula Bueno-Soria & Santiago-Fragoso, 2002: 246 [type locality: Panama, Barro Colorado; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 196 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

trigonella (Flint, 1972a): 13 [type locality: Mexico, Veracruz, Fortin de las Flores; NMNH; ♂; in *Ochrotrichia* (*Metrichia*)]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Bueno-Soria 2002: 241 [checklist].

Distribution. —Honduras, Mexico.

triquetra Bueno-Soria & Holzenthal, 2003: 195 [type locality: Costa Rica, San José, Río Savegra, ca. San Gerardo de Dota, 9.33°N 83.48°W, 2200 m; CMNH; ♂]. —Bueno-Soria and Santiago-Fragoso 2002: 253 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Cornejo 2015: 196 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Panama.

trisignata Mey & Ospina-Torres, 2018: 28 [type locality: Colombia, Bogotá, Chapinero, Quebrada La Vieja; ICN; ♂].

Distribution. —Colombia.

trispinosa (Bueno-Soria, 1977): 142 [type locality: Mexico, Veracruz, Eyipantla; CNIN; ♂; in *Ochrotrichia* (*Metrichia*)]. —Bueno-Soria 2002: 241 [checklist].

Distribution. —Mexico.

truncata Bueno-Soria & Holzenthal, 2003: 195 [type locality: Costa Rica, Alajuela, Río Pizote, ca. 5 km (air) S Brasilia, 10.972°N 84.345°W, 390 m; UMSP; ♂]. —Bueno-Soria and Santiago-Fragoso 2002: 253 [distribution].

Distribution. —Costa Rica.

ubajara Santos, Takiya, & Nessimian, 2016: 43 [type locality: Brazil, Ceará, Ubajara, Parque Nacional de Ubajara, Rio das Minas, 03°49'58"S 40°53'53"W, 420 m; DZRJ; ♂].

Distribution. —Brazil.

vulgaris Santos, Takiya, & Nessimian, 2016: 45 [type locality: Brazil, Rio de Janeiro, Itatiaia, Rio Palmital, 22°25'34"S 44°32'52"W, 637 m; DZRJ; ♂].

Distribution. —Brazil.

warema (Flint, 1974b): 61 [type locality: Suriname, Litani River, Waremapan Rapids; RMNH; ♂; in *Ochrotrichia* (*Metrichia*)].

Distribution. —Suriname.

yalla (Flint, 1968b): 50 [type locality: Jamaica, St. Andrew, Chestervale, Yallahs River; NMNH; ♂; in *Ochrotrichi* (*Metrichia*)]. —Flint 1968a: 82 [checklist]. —Botosaneanu 2002b: 85 [checklist].

Distribution. —Jamaica.

yavesia Bueno-Soria, 2002: 239 [type locality: Mexico, Oaxaca, Santa María de Yavesia (Planta embotelladora de agua), 17°13'36"N 96°25'35"W, 1930 m; CNIN; ♂]. —Razo-González et al. 2020: 5 [distribution].

Distribution. —Mexico.

Genus *Nothotrichia* Flint, 1967

Nothotrichia Flint, 1967a: 56 [type species: *Nothotrichia illiesi* Flint, 1967a, original designation]. —Marshall 1979b: 219 [generic review; considered incertae sedis within Hydroptilidae]. —Harris and Armitage 1997: 123 [re-description; placement]. —Oláh and Johanson 2011: 203 [re-description]. —Parys and Harris 2013: 590 [larva; taxonomic remarks].

Nothotrichia contains six species recorded from California, Chile, Costa Rica, and Brazil. Marshall (1979b) was unable to place the genus in a subfamily. Similar to *Caledonotrichia*, Harris and Armitage (1997) added *Nothotrichia* to Ochrotrichiinae based upon phylogenetic assessments made by Kelley (1992) and their own specimen comparison, with the admission that they were still determining synapomorphies. Following a likely mistake in the Trichoptera World Checklist (Morse 2006), Holzenthal et

al. (2007b) listed *Nothotrichia* as a member of Orthotrichiinae. Oláh and Johanson (2011) also placed *Nothotrichia* in Ochrotrichiinae, with no discussion or explanation of their analysis. The larva of *N. shasta* was described by Parys and Harris (2013).

cautinensis Flint, 1983: 40 [type locality: Chile, Pcia. Cautín, Río Cautín, Cajón; NMNH; ♂]. —Harris and Armitage 1997: 125 [♂; ♀; re-description]. —Angrisano 1999: 33 [checklist]. —Oláh and Johanson 2011: 213 [distribution].

Distribution. —Chile.

illiesi Flint, 1967a: 56 [type locality: Chile, Prov. Cautín, brook on Lago Villarica; NMNH; ♂]. —Flint 1974a: 87 [checklist]. —Harris and Armitage 1997: 124 [♂; ♀; re-description]. —Angrisano 1999: 33 [checklist].

Distribution. —Chile.

munozii Holzenthal & Harris, 2002: 106 [type locality: Costa Rica, Guanacaste, Area de Conservación Guanacaste, Parque Nacional Guanacaste, Estación Maritza, Rio Tempisquito, 10.958°N 85.497°W, 550 m; UMSP; ♂].

Distribution. —Costa Rica.

panama Harris & Armitage, 2015: 11 [type locality: Panama, Chiriquí Province, Cuenca 108, Tributary of Quebrada Grande, at waterfall, Boquete, Valle Escondido, 8.78291°N 82.44579°W, 1253 m; MIUP; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Panama.

shasta Harris & Armitage, 1997: 126 [type locality: United States, California, Shasta County, Castle Creek, 0.2 km W Castle Crag State Park on Castle Creek Road; NMNH; ♂]. —Parys and Harris 2013: 589 [larva; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

tupi Holzenthal & Harris, 2002: 109 [type locality: Brazil, Minas Gerais, Parque Estadual Itacolomi, Rio Belchior, 20°25.041'S 43°25.633'W, 725 m; MZUSP; ♂]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 49 [checklist].

Distribution. —Brazil.

Genus *Ochrotrichia* Mosely, 1934

Polytrichia Sibley, 1926: 102 [type species: *Ithytrichia confusa* Morton, 1905, monotypic; preoccupied].

Ochrotrichia Mosely, 1934a: 162 [type species: *Ochrotrichia insularis* Mosely, 1934, original designation; although synonymized with *Polytrichia* by Mosely (1937b); Ross (1944) recognized *Polytrichia* as preoccupied and resurrected *Ochrotrichia*]. —Ross 1944: 126 [species keys to larvae and adults]. —Denning and Blickle 1972: 141 [review]. —Marshall 1979b: 185 [generic review]. —Blickle 1979: 26 [key to species of America north of Mexico]. —Vinikour 1982: 150 [phoretic association observed]. —Frazer and Harris 1991a: 363 [phylogenetic analysis of *Ochrotrichia shawnee*

group]. —Moulton and Stewart 1996: 115 [key to species of the Interior Highlands of North America]. —Bueno-Soria 2009: 60 [revision]. —Oláh and Johanson 2011: 213 [re-description].

The genus *Ochrotrichia* currently contains 226 species, including five fossil species known from Dominican amber. Extant species occur throughout North, Central, and South America. Flint (1972a) attempted to divide the genus into species groups, but as species continued to be added, the group definitions proved too weak to be upheld. *Ochrotrichia* is probably closely related to *Metrichia*, but males of the former often have much more complicated genitalic structures (Marshall 1979b). Larvae have been associated and described for several species (Ross 1944; Roldán-Perez 1988; Wiggins 1996; Keiper and Harris 2002). The pupae of a species from Costa Rica were recorded as being parasitized by a ceraphronid wasp (Luhman et al. 1999).

affinis Bueno-Soria & Holzenthal, 2004: 251 [type locality: Mexico, Tabasco, Municipio de Huimanguillo, Ejido Villa de Guadalupe, 1ª sección Cascada Cerro de Las Flores, 17°21'39"N 93°37'29"W, 540 m; CNIN; ♂]. —Bueno-Soria 2009: 133 [♂].

Distribution. —Mexico.

alargada Bueno-Soria & Holzenthal, 2004: 246 [type locality: Mexico, Guerrero, Municipio de Taxco: Teusisapan, Rio Temazcalapa, 12 km. NW Ahuehuepan, Rta 51, 18°25.26'N 99°42.5'W, 1052 m; CNIN; ♂]. —Bueno-Soria 2009: 112 [♂].

Distribution. —Mexico.

aldama (Mosely, 1937b): 185 [type locality: Mexico, Chiapas, Esmeralda; NHMUK; ♂; in *Polytrichia*]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Wells and Wichard 1989: 46 [in Dominican amber]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2002b: 86 [checklist]. —Bueno-Soria and Holzenthal 2004: 246 [distribution]. —Bueno-Soria and Holzenthal 2008: 48 [distribution]. —Wichard 2007: 48 [checklist; in amber]. —Eskov et al. 2008: 78 [checklist]. —Pérez-Gelabert 2008: 300 [checklist]. —Bueno-Soria 2009: 110 [♂; distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Mendez et al. 2019: 128 [checklist].

Distribution. —Costa Rica, Dominican Republic (in amber), Mexico, Panama.

alexanderi Denning & Blickle, 1972: 145 [type locality: [United States], Humboldt County, California, Bear River; CAS; ♂; specimen damaged]. —Blickle and Denning 1977: 287 [checklist]. —Blickle 1979: 51, 87 [checklist; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

† ***aliceae*** Wichard, 2000: 242 [type locality: Dominican Republic; NMNH; in amber]. —Wichard 2007: 48 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican amber.

alsea Denning & Blickle, 1972: 143 [type locality: [United States], Tumalo State Park, Deschutes County, Oregon; CAS; ♂]. —Blickle and Denning 1977: 287 [checklist]. —Blickle 1979: 51, 85 [checklist; ♂]. —Ruiter 1999: 165 [distribution]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Ruiter and Harris 2015: 328 [♂; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

amorfa Bueno-Soria & Holzenthal, 2004: 252 [type locality: Mexico, Tabasco, Municipio de Huimanguillo, Arroyo las Flores, Villa de Guadalupe, 2ª sección, Los Chimalapas km 5 Ruta Malpasito-Carlos A. Madrazo, 17°nn'05"N 93°36'25"W, 540 m; CNIN; ♂]. —Bueno-Soria 2009: 133 [♂].

Distribution. —Mexico.

angularis Bueno-Soria, 2009: 131 [type locality: Mexico, Morelos, Huautla, Reserva de la Biosfera de Huautla, 18°20'10"N 98°51'20"W, 900 m; CNIN; ♂].

Distribution. —Mexico.

anisca (Ross, 1941a): 58 [type locality: [United States], Illinois, Wolf Lake; INHS; ♂; in *Polytrichia*]. —Ross 1944: 131 [♂; ♀; distribution]. —Unzicker et al. 1970: 172 [distribution]. —Edwards 1973: 506 [distribution]. —Blickle and Denning 1977: 287 [checklist]. —Blickle 1979: 51, 79 [checklist; ♂]. —Hamilton et al. 1983: 18 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Frazer and Harris 1991a: 366–367 [♂]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 116 [♂; checklist]. —Moulton and Stewart 1997: 350 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

anomala Bueno-Soria & Santiago-Fragoso, 1997: 365 [type locality: Panama, Barro Colorado Island, Snyder-Molino Trail, Marker 3; NMNH; ♂]. —Bueno-Soria 2009: 68 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Panama.

apalachicola Harris, Pescador, & Rasmussen, 1998: 224 [type locality: [United States], Florida, Liberty County, Nature Conservancy Apalachicola Bluffs and Ravines Preserve, Beaver Dam Creek; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 9 [checklist].

Distribution. —U.S.A.

argentea Flint & Blickle in Denning and Blickle 1972: 150 [type locality: United States N[ew] Mex[ico], Near Silver City, Cherry Creek Rec. Area; NMNH; ♂]. —Blickle and Denning 1977: 287 [checklist]. —Blickle 1979: 51, 83 [checklist; ♂]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Bueno-Soria 2009: 147 [♂]. —Vieira et al. 2009: 257 [distribution]. —Ruiter and Harris 2015: 3230 [♂; distribution].

Distribution. —Mexico, U.S.A.

arizonica Denning & Blickle, 1972: 145 [type locality: [United States], Southwest Research Station, 7 miles west of Portal, Arizona, Chiricahua Mountains, 5400 ft; CAS; ♂]. —Blickle and Denning 1977: 287 [checklist]. —Blickle 1979: 51, 79 [checklist; ♂]. —English and Hamilton 1986: 475 [larva; ♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Mendez et al., 2019: 118 [checklist].

Distribution. —U.S.A.

arranca (Mosely, 1937b): 185 [type locality: Mexico, Chiapas, Barranca Honda NHMUK; ♂; in *Polytrichia*]. —Flint 1972a: 7 [re-description; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Rojas-Ascensio et al. 2002: 377 [distribution]. —Bueno-Soria et al. 2005: 75 [distribution]. —Bueno-Soria and Holzenthal 2008: 48 [distribution]. —Bueno-Soria 2009: 122 [♂]. —Armitage et al. 2016: 10 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Costa Rica, Mexico, Panama.

arriba Bueno-Soria & Santiago-Fragoso, 1997: 361 [type locality: Panama, Chiriqui, Guadalupe Arriba, 8°52'26"N 82°33'13"W; NMNH; ♂]. —Bueno-Soria 2009: 114 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

arva (Ross, 1941a): 58 [type locality: [United States], Tennessee, Martin Springs; INHS; ♂; in *Polytrichia*]. —Blickle and Denning 1977: 288 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 51, 87 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Huryn and Foote 1983: 790 [distribution]. —Harris et al. 1991: 226 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 117 [♂; distribution]. —Houp 1999: 2 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

assita Bueno-Soria & Holzenthal, 2004: 251 [type locality: Panama, Chiriqui, Fortuna Dam site near Hornitos, 8°55'N 82°16'W, 1050 m; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 48 [distribution]. —Bueno-Soria 2009: 114 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Panama.

atezcae Bueno-Soria & Santiago-Fragoso, 1981: 384 [type locality: Mexico, Hidalgo, Laguna de Atezca, 3 km de Molango; CNIN; ♂]. —Bueno-Soria 2009: 132 [♂].

Distribution. —Mexico.

attenuata Flint, 1972a: 11 [type locality: Guatemala, Huehuetenango, 32 km NW Huehuetenango; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria 2009: 154 [♂].

Distribution. —Guatemala.

avicula Bueno-Soria & Holzenthal, 2008: 42 [type locality: Costa Rica, Puntarenas, Río Jaba at rock quarry, 1.4 km (air) W Las Cruces, 8.79°N 82.97°W, 1150 m; UMSP; ♂].

Distribution. —Costa Rica.

avis Bueno-Soria & Holzenthal, 1998: 606 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs, 10°12'96"N, 84°36'42"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 48 [distribution]. —Bueno-Soria 2009: 115 [♂]. —Armitage et al. 2016: 10 [distribution]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Panama.

ayaya Botosaneanu, 1977: 260 [type locality: Cuba, Oriente, Baracoa, Rio Sabanilla; NMNH; ♂; as subspecies of *O. insularis*]. —Botosaneanu 1979: 49 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu in Botosaneanu and Hyslop 1998: 13 [as distinct species]. —Botosaneanu 2002b: 86 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

balra Oláh & Johanson, 2011: 214 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

baorucoensis Flint & Sykora, 2004: 36 [type locality: Dominican Republic, Barahona Province, San Rafael, 8.3 km S of Baoruco, 18°01.9'N 71°8.4'W, 30 m; NMNH; ♂]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic.

bicaudata Bueno-Soria & Santiago-Fragoso, 1997: 367 [type locality: Panama, Barro Colorado Island, Snyder-Molino Trail, Marker 3; NMNH; ♂]. —Bueno-Soria 2009: 115 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

bickfordae Ruiter, 2011: 421 [type locality: USA, California, Fresno County, Little Dry Creek, Marshall Station; CAS; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

bipartita Flint & Bueno-Soria, 1999: 732 [type locality: Peru, Department Cuzco, Province Paucartambo, stream, 50 m E Quitacalzón; MHNJP; ♂; ♀].

Distribution. —Peru.

birdae Harris & Armitage, 2019: 15 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂]. —Armitage and Harris 2020a: 8 [distribution].

Distribution. —Panama.

blanca Bueno-Soria & Santiago-Fragoso, 1997: 363 [type locality: Belize, Cayo District, Rio Privassion, Blancaneaux Lodge; NMNH; ♂]. —Bueno-Soria 2009: 129 [♂].

Distribution. —Belize.

bogani Ruiter, 2011: 422 [type locality: USA, California, Fresno County, Little Dry Creek, Marshall Station; CAS; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

boquillas Moulton & Harris, 1997: 496 [type locality: United States, Texas, Brewster Co, Glenn Spring, Big Bend National Park; NMNH; ♂]. —Baumgardner and Bowles

2005: 11 [distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Armitage et al. 2020: 4 [distribution].

Distribution. —Mexico, Panama, U.S.A.

boydi Ruiter & Harris, 2015: 320 [type locality: [United States], California, River County, P. L. Boyd Desert Research Center, 3.5 mi S Palm Desert, Marker #(-)9, beating fan palm *Washingtonia filifera*) Linden ex André) H. Wendland ex A. de Bary (Arecaceae); EMEC; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

bractea Bueno-Soria & Holzenthal, 2004: 252 [type locality: Mexico, Morelos, Municipio de Huautla, Reserva de la Biosfera de Huautla, 18°20'10"–18°34'20"N 98°51'20"–99°08'15"W, 900 m; CNIN; ♂]. —Bueno-Soria 2009: 130 [♂].

Distribution. —Mexico.

brayi Flint, 1968a: 61 [type locality: Dominica, Freshwater Lake; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Flint and Sykora 1993: 50 [checklist]. —Botosaneanu 2000: 250 [♀]. —Botosaneanu 2002b: 86 [checklist]. —Botosaneanu and Thomas 2005: 55 [checklist].

Distribution. —Dominica, Guadeloupe.

† *brodzinskyi* Wells & Wichard, 1989: 45 [type locality: Dominican Republic; Collection Wichard; ♂; in amber]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2002b: 86 [checklist]. —Wichard 2007: 48 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican amber.

buccata Denning & Blickle, 1972: 147 [type locality: [United States], Burney Falls, Shasta County, California; CAS; ♂; specimen damaged]. —Blickle and Denning 1977: 288 [checklist]. —Blickle, 1979: 51, 87 [checklist; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

buenoi Razo-González, 2018: 29 [type locality: Mexico, Oaxaca, Santa Catarina Lachatao, Las Vigas, 17°10'43"N, 96°26'51"W, 2689 m asl; CNIN; ♂]. —Razo-González et al. 2020: 5 [distribution].

Distribution. —Mexico.

burdicki Denning, 1989: 129 [type locality: [United States], California, Fresno County, Dry Creek; CAS; ♂; ♀]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

caatinga de Souza, Santos & Takiya, 2014a: 274 [type locality: Brazil, Ceará, Ubajara, Parque Nacional de Ubajara, Rio Cafundó, acima da cachoeira, 3°50'13"S 40°54'19"W, 874 m; CZMA; ♂]. —Paprocki and França 2014: 50 [checklist]. —Cavalcante et al. 2018: 235 [distribution]. —Moreno et al. 2020: 265 [distribution].

Distribution. —Brazil.

cachonera Botosaneanu, 1995a: 23 [type locality: Dominican Republic, springs near La Descubierta, S of Sierra de Neiba; ZMUA; ♂]. —Botosaneanu 2002b: 86 [checklist]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Flint and Sykora 2004: 36 [distribution]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican Republic.

caimita Flint, 1972a: 6 [type locality: Panama, Chiriqui, Rio Caimito, 16 km NW David; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Aguila 1992: 538 [distribution]. —Bueno-Soria and Holzenthal 2008: 49 [distribution]. —Bueno-Soria 2009: 134 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution; as *caimata*].

Distribution. —Costa Rica, Panama.

calcarata Flint & Bueno-Soria, 1999: 733 [type locality: Peru, Department Cuzco, Province Paucartambo, Puente Ssan Pedro at km 152, 44 km (road) W of Pilcopata, 13°03.30'S 71°32.78'W; MHNJP; ♂].

—*Ochrotrichia* (O.) n. sp. 3: Flint 1996c: 398. —Flint and Bueno-Soria 1999: 733 [to synonymy].

Distribution. —Peru.

caligula Flint, 1968b: 49 [type locality: Jamaica, St. Andrew, Hope River near Newcastle at mile post 16.5; NMNH; ♂]. —Flint 1968a: 82 [checklist]. —Blickle and Denning 1977: 289 [checklist]. —Botosaneanu 2002b: 86 [checklist].

Distribution. —Jamaica.

campanilla Flint & Bueno-Soria, 1999: 735 [type locality: Peru, Department Madre de Dios, Province Manu, Pakitza, trail 1, 1st stream; MHNJP; ♂].

—*Ochrotrichia* (O.) n. sp. 4: Flint 1996c: 398. —Flint and Bueno-Soria 1999: 735 [to synonymy].

Distribution. —Peru.

canicula Bueno-Soria, 2009: 148 [type locality: Mexico, Estado de Mexico, Tetesontle, 19°05'37"N 98°36'22"N, 3350 m; CNIN; ♂].

Distribution. —Mexico.

capitana Ross, 1944: 275 [type locality: [United States], Texas, McKittrick Creek, McKittrick Canyon (near Frijole); INHS; ♂]. —Edwards 1973: 506 [distribution]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 51, 87 [checklist; ♂]. —Moulton et al. 1993: 21 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Bowles et al. 2007: 22 [distribution; biology].

Distribution. —U.S.A.

caramba Botosaneanu, 1977: 262 [type locality: Cuba, Oriente, Gran Piedra, Arroyos de la Idalia; NMNH; ♂]. —Botosaneanu 1979: 48 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 86 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

catarina Bueno-Soria & Holzenthal, 2004: 249 [type locality: Mexico, Oaxaca, Santa Catarina La Chatao, 17°15'58"N 96°28'15"W, 2160 m; CNIN; ♂]. —Bueno-Soria 2009: 116 [♂].

Distribution. —Mexico.

cavitectum Botosaneanu in Botosaneanu and Hyslop 1998: 13 [type locality: Jamaica, St. Ann, Roaring River W. from Ocho Rios; ZMUA; ♂]. —Botosaneanu 2002b: 86 [checklist].

Distribution. —Jamaica.

cebollati Angrisano, 1995a: 509 [type locality: Uruguay, Lavalleja, Río Cebollatí, Picada de Rodriguez; FHCU; ♂; type of subgenus *Paratrachia* of *Ochrotrachia*].

Distribution. —Uruguay.

† ***chaulioda*** Wells & Wichard, 1989: 46 [type locality: Dominican Republic; NMNH; ♂; in amber]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2002b: 86 [checklist]. —Wichard 2007: 48 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Pérez-Gelabert 2008: 300 [checklist].

Distribution. —Dominican amber.

chiapa Denning & Blickle, 1972: 147 [type locality: Mexico, Chiapas, 6 miles south of Puebla Nueva; CAS; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Bueno-Soria 2009: 148 [♂].

Distribution. —Mexico.

cieneguilla Harris in Harris and Moulton 1993: 545 [type locality: Mexico, Nuevo León, Municipio de Santiago, Cola de Caballo, down stream falls, 3 km SW Cieneguilla NMNH; ♂]. —Bueno-Soria 2009: 123 [♂].

Distribution. —Mexico.

citra Bueno-Soria & Holzenthal, 2004: 247 [type locality: Mexico, Tabasco, Municipio de Huimanguilla Rta. Malpasito-Carlos A. Madrazo, Ejido Villa de Guadalupe, 1a sección Cascada Cerro de las Flores, 17°21'39"N 93°37'29"W, 540 m; CNIN; ♂]. —Bueno-Soria 2009: 117 [♂].

Distribution. —Mexico.

cochisei Ruiter & Harris, 2015: 321 [type locality: [United States], Arizona, Cochise County, Portal; EMEC; ♂].

Distribution. —U.S.A.

compacta Bueno-Soria & Holzenthal, 2004: 247 [type locality: Mexico, Tabasco, Municipio de Huimanguillo Rta. Malpasito-Carlos A. Madrazo, Ejido Villa de Guadalupe, 1a sección Cascada Cerro de las Flores, 17°21'39"N 93°37'29"W, 540 m; CNIN; ♂]. —Bueno-Soria 2009: 117 [♂].

Distribution. —Mexico.

concha Bueno-Soria & Santiago-Fragoso, 1992: 443 [type locality: Brazil, Amazonas State, AM010, km 246, ca. 20 km W Itacoatiara; NMNH; ♂]. —Angrisano 1999: 34 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 50 [checklist].

Distribution. —Brazil.

conformalis Bueno-Soria & Holzenthal, 2008: 45 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón Río San Lorencito and tribs., 10.216°N 84.607°W, 980 m; UMSP; ♂]. —Armitage et al. 2020: 5 [distribution].

Distribution. —Costa Rica, Panama.

confusa (Morton, 1905): 69 [type locality: United States, New York, Ithaca; depository not designated; ♂; as *Ithytrachia*]. —Banks 1907a: 50 [catalogue]. —Lloyd 1915: 117 [larva; habitat]. —Betten 1934: 154 [♂; distribution; in *Polytrachia*]. —Ross 1944: 133 [larva; to *Ochrotrachia*]. —Denning and Blickle 1972: 142 [checklist]. —Blickle and Denning 1977: 288 [checklist]. —Etnier and Schuster 1979:

18 [distribution]. —Blickle 1979: 51, 81 [checklist; ♂]. —Vaillant 1984: 407 [larva; biology]. —Sinclair and Marshall 1986: 10 [distribution]. —Morse et al.: 23 [distribution]. —Sinclair 1990: 284 [distribution]. —Harris et al. 1991: 227 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Moulton and Stewart 1997: 350 [checklist]. —Pescador et al. 2004: 133 [checklist]. —Bueno-Soria et al. 2007: 33 [distribution]. —Bueno-Soria 2009: 124 [♂]. —Armitage et al. 2011: 14 [checklist]. —Harris et al. 2012: 9 [checklist]. —Ruiter and Harris 2015: 330 [♂; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Canada, Mexico, U.S.A.

constricta de Souza, Santos, & Takiya, 2014a: 278 [type locality: Brazil, Irapiúna, Reserva Ecológica Michelin, Mata da Vila 5, 13°49'22.9"S 39°12'6.5"W, 87 m; DZRJ; ♂]. —Paprocki and França 2014: 50 [checklist].

Distribution. —Brazil.

contorta (Ross, 1941a): 60 [type locality: [United States], Missouri, Greet Spring; INHS; ♂; in *Polytrichia*]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 51, 79 [checklist; ♂]. —Frazer and Harris 1991a: 366–367 [♂]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 117 [♂; distribution]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

contrerasi Harris in Harris and Moulton 1993: 545 [type locality: Mexico, Tamaulipas, Municipio de Gómez Farias, Río Frio at La Poza Azul, 6 km S Gómez Farias; NMNH; ♂]. —Bueno-Soria 2009: 149 [♂].

Distribution. —Mexico.

corneolus Bueno-Soria & Santiago-Fragoso, 1997: 365 [type locality: Panama, Barro Colorado Island, Snyder-Molino Trail, Marker 3; NMNH; ♂]. —Bueno-Soria 2009: 135 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

crucecita Bueno-Soria & Santiago-Fragoso, 1997: 360 [type locality: Panama, Chiriqui, Guadalupe Arriba, 8°52'26"N 82°33'13"W; NMNH; ♂]. —Bueno-Soria 2009: 144 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

cruces Flint, 1967b: 12 [type locality: Mexico, Las Cruces National Park, La Marquesa; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Bueno-Soria 2009: 145 [♂].

Distribution. —Mexico.

csiga Oláh & Johanson, 2011: 215 [type locality: Peru, San Martin Prov., creek crossing rd. Juan Guerra-Chazuta, 14 km (rd.) E Colombia Bridge, 6°35.594'S 76°13.172'W; NHRS; ♂].

Distribution. —Peru.

curvata Bueno-Soria & Holzenthal, 2004: 250 [type locality: Panama, Chiriqui: Fortuna Dam site near Hornitos, 8°55'N 82°16'W, 1050 m; NMNH; ♂].

—Bueno-Soria 2009: 135 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

cuspidatus Bueno-Soria & Holzenthal, 2004: 254 [type locality: Mexico, Guerrero, Municipio Taxco, Teusisapan, Río Temascalapa, 12 km. NW Ahuehuepan Rta. 51, 18°25.56'N 99°42.5'W, 1052 m; CNIN; ♂]. —Bueno-Soria 2009: 149 [♂].

Distribution. —Mexico.

dactylophora Flint, 1965: 171 [type locality: United States, Arizona, Coconino County, West Fork, 16 miles southwest of Flagstaff, 6500 ft; NMNH; ♂]. —Denning and Blickle 1972: 142 [checklist]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 51, 85 [checklist; ♂]. —Moulton et al. 1994: 170 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton 2001: 90 [distribution]. —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Blinn and Ruiter 2009a: 303 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Bueno-Soria 2009: 125 [♂; distribution].

Distribution. —Mexico, U.S.A.

dardeni Harris, 1986a: 613 [type locality: [United States], Alabama, Wilcox County, Chilatchee Creek at Hwy. 5; NMNH; ♂]. —Tarter 1990: 239 [checklist]. —Harris et al. 1991: 228 [distribution].

Distribution. —U.S.A.

delgada Bueno-Soria & Holzenthal, 2004: 253 [type locality: Mexico, Tabasco, Municipio de Huimanguillo, km 5 Ruta Malpasito-Carlos A. Madrazo, Arroyo Las Flores Villa de Guadalupe, 2ª sección Los Chimalapas, 17°22'05"N 93°36'25"W, 545 m; CNIN; ♂]. —Bueno-Soria 2009: 150 [♂].

Distribution. —Mexico.

† *denaia* Wells & Wichard, 1989: 47 [type locality: Dominican Republic; NMNH; ♂; in amber]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2002b: 86 [checklist]. —Wichard 2007: 48 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican amber.

denningi Blickle & Morse, 1957: 50 [type locality: [United States], Plymouth, N.H. [New Hampshire]; INHS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 51, 79 [checklist; ♂]. —Tarter 1990: 239 [checklist]. —Frazer and Harris 1991a: 366–367 [♂]. —Masteller and Flint 1992: 70 [checklist].

Distribution. —U.S.A.

dewalti Harris & Armitage, 2019: 15 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂].

Distribution. —Panama.

† *doehleri* Wichard, 1981: 161 [type locality: Dominican Republic; Collection Wichard; ♂; in amber]. —Wells and Wichard 1989: 48 [♂; re-description]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Botosaneanu 2002b: 86 [checklist].

—Wichard 2007: 48 [checklist]. —Pérez-Gelabert 2008: 301 [checklist]. —Eskov et al. 2008: 78 [checklist].

Distribution. —Dominican amber.

dulce Bueno-Soria & Holzenthal, 1998: 608 [type locality: Costa Rica, Guanacaste, Río Tizate, 7.2 km N.E. Cañas Dulces, 10°43'98"N 66°[sic, should be 85°]26'94"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 49 [distribution]. —Bueno-Soria 2009: 140 [♂].

Distribution. —Costa Rica.

ecuatoriana Bueno-Soria & Santiago-Fragoso, 1992: 440 [type locality: Ecuador, Pastaza Prov., Puyo; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Oláh and Johanson 2011: 218 [distribution]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Colombia, Ecuador, Peru.

eliaga (Ross, 1941a): 57 [type locality: [United States], Tennessee, Jasper; INHS; ♂; in *Polytrichia*]. —Ross 1944: 132 [♂; ♀; distribution]. —Blickle and Denning 1977: 288 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 51, 85 [checklist; ♂]. —Waltz and McCafferty 1983a: 10 [distribution]. —Harris et al. 1991: 229 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 117 [♂; distribution]. —Houp 1999: 2 [distribution]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

elongiralla Harris, 1986b: 32 [type locality: [United States], Alabama, Tuscaloosa County, unnamed tributary to Wallace Branch, 5 mile southeast Berry (R10W, T17S, S2); NMNH; ♂]. —Harris et al. 1991: 230 [distribution].

Distribution. —U.S.A.

escalantea Ruiter & Harris, 2015: 322 [type locality: [United States], Utah, Garfield County, Death Hollow near Boulder Mail Trail, Grand Staircase Escalante National Monument; CAS; ♂].

Distribution. —U.S.A.

escoba Flint, 1972a: 9 [type locality: Guatemala, Izabal, Las Escobas, near Matias de Galvez; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria 2009: 141 [♂]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Mexico, Guatemala.

eyipantla Bueno-Soria & Santiago-Fragoso, 1998: 363 [type locality: Mexico, Veracruz, Salto de Eyipantla, Eyipantla River; CNIN; ♂]. —Bueno-Soria et al. 2005: 75 [distribution]. —Bueno-Soria 2009: 130 [♂].

Distribution. —Mexico.

felipe Ross, 1944: 275 [type locality: [United States], Texas, San Felipe Springs, Del Rio; INHS; ♂]. —Flint 1972a: 9 [♂; distribution]. —Edwards 1973: 506 [distribution]. —Blickle and Denning 1977: 288 [checklist]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Blickle 1979: 51, 87 [checklist; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Bueno-Soria 2009: 141 [♂]. —Bowles et al. 2007: 22 [distribution; biology].

Distribution. —Mexico, U.S.A.

filiforma Flint, 1972a: 9 [type locality: Costa Rica, Cartago, Chitaria; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Holzenthal 1988: 62 [distribution]. —Bueno-Soria and Holzenthal 2008: 49 [distribution]. —Bueno-Soria 2009: 142 [♂].

Distribution. —Costa Rica.

fioka Oláh & Johanson, 2011: 217 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

flagellata Flint, 1972a: 5 [type locality: Panama Canal Zone, Barro Colorado Island; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Aguila 1992: 538 [distribution]. —Bueno-Soria 2009: 110 [♂; distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Panama, Mexico.

flexura Flint & Bueno-Soria, 1999: 372 [type locality: Peru, Department Madre de Dios, Province Manu, Pakitza, trail 2, marker 15, Quebrada Trompetero; MHNJP; ♂]. —*Ochrotrichia* (O.) n. sp. 8: Flint 1996c: 399. —Flint and Bueno-Soria 1999: 732 [to synonymy].

Distribution. —Peru.

flintiana Kumanski, 1987: 18 [type locality: Cuba, Province las Villas, S. foothills of Sierra de Trinidad, Rio Ssan Juan de la Juyua; SOFM; ♂]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 86 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

footei Keiper & Harris, 2002: 292 [type locality: United States, California, Riverside County near Idyl Wild, Fullers Mill Creek; CLEV; ♂; larva; pupa]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

fossi Ruiter & Harris, 2015: 324 [type locality: [United States], California, Napa County, Milliken Creek at Atlas Peak road bridge, Circle S Ranch, N38.41649, W122.24987; CAS; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

glabra Bueno-Soria & Santiago-Fragoso, 1997: 364 [type locality: Panama, Chiriqui, Guadalupe Arriba, 8°52'26"N 82°33'13"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 49 [distribution]. —Bueno-Soria 2009: 110 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Panama.

graysoni Parker & Voshell, 1980: 369 [type locality: [United States], Virginia, Bath Co., Jackson River, Rt. 603 2 miles S. Rt. 687; NMNH; ♂; ♀]. —Harris et al. 1984: 109 [distribution]. —Tarter 1990: 239 [checklist]. —Harris et al. 1991: 231 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —DeWalt and Heinold 2005: 42 [phenology; distribution].

Distribution. —U.S.A.

gretae Bueno-Soria, 2009: 113 [type locality: Mexico, Chihuahua, Mpio. Guachochi, km 114.5 Route 25 Creel-Guachochi, 27°35'05"N 107°32'46"W, 2150 m; CNIN; ♂].

Distribution. —Mexico.

guadalupensis Harris & Moulton, 1993: 542 [type locality: United States, Texas, Culberson County, Smith Spring, 2.4 km N Park headquarters, Guadalupe Mountains National Park; NMNH; ♂]. —Moulton and Stewart 1997: 350 [checklist].

Distribution. —U.S.A.

gurneyi Flint, 1964: 60 [type locality: Puerto Rico, El Yunque, cabins at La Mina; NMNH; ♂]. —Flint 1968a: 82 [checklist]. —Blickle and Denning 1977: 289 [checklist]. —Blickle 1979: 79 [♂]. —Botosaneanu 2002b: 86 [checklist].

Distribution. —Puerto Rico.

hadria Denning & Blickle, 1972: 143 [type locality: [United States], Shasta County, California, Burney Falls; CAS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 51, 87 [checklist; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

hamatilis Flint & Bueno-Soria, 1999: 733 [type locality: Peru, Department Madre de Dios, Province Manu, Pakitza, trail 2, first stream; MHNJP; ♂; ♀].

—*Ochrotrichia* (O.) n. sp. 6: Flint 1996c: 398. —Flint and Bueno-Soria 1999: 733 [to synonymy].

Distribution. —Peru.

harmas Oláh & Johanson, 2011: 218 [type locality: Peru, San Martin Prov., creek crossing rd. Juan Guerra-Chazuta, 14 km (rd.) E Colombia Bridge, 6°35.594'S 76°13.172'W; NHRS; ♂].

Distribution. —Peru.

hata Oláh & Johanson, 2011: 220 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.072'N 52°12.462'W, 270 m; NHRS; ♂].

Distribution. —French Guiana.

hondurenia Bueno-Soria & Santiago-Fragoso, 1997: 364 [type locality: Belize, Cayo District, Mountain Pine Ridge; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 49 [distribution]. —Bueno-Soria, 2009: 111 [♂].

Distribution. —Belize, Costa Rica.

honeyi Blickle & Denning, 1977: 292 [type locality: [United States], California, Yosemite National Park, Mariposa County, S. Fork Merced River; ESUW; ♂]. —Blickle 1979: 52, 83 [checklist; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

igrapiuna de Souza, Santos, & Takiya, 2014a: 278 [type locality: Brazil, Igrapiúna, Reserva Ecológica Michelin, Mata de Vila 5, 13°49'22.9"S 39°12'6.5"W, 87 m; DZRJ; ♂]. —Paprocki and França 2014: 50 [checklist].

Distribution. —Brazil.

ildria Denning & Blickle, 1972: 145 [type locality: United States, Arizona, Oak Creek Canyon; CAS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979:

52, 81 [checklist; ♂]. —Moulton et al. 1994: 170 [distribution]. —Houghton 2001: 90 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Bueno-Soria 2009: 150 [♂]. —Blinn and Ruiter 2009a: 306 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Razo-González et al. 2020: 5 [distribution].

Distribution. —Mexico, U.S.A.

indefinida Bueno-Soria & Holzenthal, 2004: 248 [type locality: Mexico, Tabasco, Municipio de km 5 Ruta Malpasito-Carlos A. Madrazo, Arroyo las Flores Villa de Guadalupe 2ª sección Los Chimalapas, 17°22'05"N 93°36'25"W, 545 m; CNIN; ♂]. —Bueno-Soria 2009: 136 [♂].

Distribution. —Mexico.

ingloria Botosaneanu 1995: 25 [type locality: Dominican Republic, springs near La Descubierta, S of Sierra de Neiba; ZMAU; ♂]. —Botosaneanu 2002b: 86 [checklist]. —Flint and Pérez-Gelabert 1999: 40 [checklist]. —Flint and Sykora 2004: 37 [distribution]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic.

insularis Mosely, 1934a: 163 [type locality: Jamaica, Runaway Bay; NHMUK; ♂]. —Mosely, 1937b: 185 [to *Polytrichia*]. —Ross 1944: 126 [*Ochrotrichia* resurrected]. —Flint 1968b: 49 [♂; ♀]. —Flint 1968a: 82 [checklist]. —Blickle and Denning 1977: 289 [checklist]. —Botosaneanu and Hyslop 1998: 12 [♂; “enantiomorphic” morphotypes]. —Botosaneanu 2002b: 86 [checklist].

Distribution. —Jamaica.

intermedia Flint, 1972a: 10 [type locality: Guatemala, Chimaltenango, Tecpan Guatemala; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria 2009: 142 [♂].

Distribution. —Guatemala.

intortilis Flint & Bueno-Soria, 1999: 730 [type locality: Peru, Department Cuzco, Province Paucartambo, Puente San Pedro at km 152, 44 km (road) W of Pilcopata, 13°03.30'S, 71°32'78"W; MHNJP; ♂; ♀].

—*Ochrotrichia* (O.) n. sp. 1: Flint, 1996c: 398. —Flint and Bueno-Soria 1999: 730 [to synonymy].

Distribution. —Peru.

involuta Bueno-Soria & Holzenthal, 2004: 249 [type locality: Mexico, Guerrero, km 7 Route Taxco-Ixcateopan; CNIN; ♂]. —Bueno-Soria 2009: 143 [♂]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Mexico.

islenia Botosaneanu, 1977: 261 [type locality: Cuba, Isla de Pinos, Santa Fé, Arroyo La Talega; NMNH; ♂]. —Botosaneanu 1979: 49 [distribution]. —Kumanski 1987: 17 [distribution]. —Flint et al. 1999a: 109 [as *O. islenia*]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

ixcateopana Bueno-Soria & Santiago-Fragoso, 1997: 360 [type locality: Mexico, Guerrero, km 7 Route Taxco-Ixcateopan; CNIN; ♂]. —Rojas-Ascensio et al. 2002: 377 [distribution]. —Bueno-Soria 2009: 125 [♂].

Distribution. —Mexico.

ixtlahuaca Bueno-Soria & Holzenthal, 2004: 253 [type locality: Mexico, Hidalgo, Ixtlahuaco, Ruta 105, Hotel Campestre Conchia, 20°53.04'N, 98°607'W, 1420 m; CNIN; ♂]. —Bueno-Soria 2009: 151 [♂]. —Razo-González 2018: 32 [distribution].

Distribution. —Mexico.

jolandae Bueno-Soria & Holzenthal, 2008: 43 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón Río San Lorencito and tribs., 10.216°N, 84.607°W, 980 m UMSP; ♂]. —Armitage and Harris 2018a: 9 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

— *abrelata* Harris & Armitage, 2015: 11 [type locality: Panama, Chiriquí Province, Cuenca 108, tributary of Quebrada Grande, at waterfall, Boquete, Valle Escondido, 8.78291°N 82.44579°W, 1253 m; MIUP; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018a: 10 [to synonymy].

Distribution. —Costa Rica, Panama.

jonssoni Oláh & Johanson, 2011: 221 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.133'N, 52°12.205'W, 263 m; NHRS; ♂].

Distribution. —French Guiana.

ketaga Oláh & Johanson, 2011: 222 [type locality: Peru, San Martin Prov., creek crossing rd. Tarapoto-Yurimaguas, ca. 30 km (rd.) NE Tarapoto, 6°24.904'S, 76°18.756'W; NHRS; ♂].

Distribution. —Peru.

ketarca Oláh & Johanson, 2011: 224 [type locality: Peru, Chontachaca, Kosnipata-Cusco, humid subtropical forest, 13°01'25"S, 71°28'03"W, 700 m; NHRS; ♂].

Distribution. —Peru.

kettes Oláh & Johanson, 2011: 225 [type locality: Peru, San Martin Prov., creek crossing rd. Juan Guerra-Chazuta, 14 km (rd.) E Colombia Bridge, 6°35.594'S, 76°13.172'W; NHRS; ♂].

Distribution. —Peru.

kondratieffi Harris & Armitage, 2019: 16 [type locality: Panama, Bocas del Toro Province, tributary of Quebrada Rambala at 2nd footbridge, Rambala Jungle Lodge, 8.91627°N and 82.15469°W, 134 m; COZEM; ♂].

Distribution. —Panama.

labafura Oláh & Johanson, 2011: 227 [type locality: French Guiana, Approuaguekaw Kaw Mt, 4°33.035'N, 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

larimar Flint & Sykora, 2004: 38 [type locality: Dominican Republic, Barahona Province, Larimar Mine nr Filipinas; FSCA; ♂; ♀]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic.

legeza Oláh & Johanson, 2011: 228 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S, 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

leona Bueno-Soria & Holzenthal, 2004: 257 [type locality: Mexico, Distrito Federal, Desierto de Los Leones, Arroyo San Borja, 19°18.140'N, 99°18.648'W, 2650 m; CNIN; ♂]. —Bueno-Soria 2009: 126 [♂].

Distribution. —Mexico.

limeirai de Souza, Santos, & Takiya, 2014a: 277 [type locality: Brazil, Ceará, Ubajara, Parque Nacional de Ubajara, 3°50'31.7"S, 40°53'55"W; CZMA; ♂]. —Paprocki and França 2014: 50 [checklist].

Distribution. —Brazil.

limonensis Flint, 1981: 29 [type locality: Venezuela, Aragua, Dos Riitos, 6 km N Rancho Grande; NMNH; ♂]. —Flint 1968a: 82 [checklist]. —Botosaneanu 2002b: 86 [checklist].

Distribution. —Venezuela.

lobifera Flint, 1968b: 50 [type locality: Jamaica, St. Andrew, Hope River near Newcastle at mile post 16.5; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist].

Distribution. —Jamaica.

logana (Ross, 1941a): 54 [type locality: [United States], Utah, Logan Canyon; INHS; ♂; ♀; in *Polytrichia*]. —Ross 1944: 295 [to *Ochrotrichia*]. —Denning and Blickle 1972: 142 [checklist]. —Flint and Herrmann 1976: 898 [distribution]. —Blickle and Denning 1977: 288, 289 [distribution; ♀]. —Blickle 1979: 52, 83 [checklist; ♂]. —Ruite 1999: 165 [distribution]. —Blinn and Ruitter 2005: 69 [distribution; biology]. —Blinn and Ruitter 2006: 333 [distribution; biology]. —Blinn and Ruitter 2009a: 305 [biology]. —Bueno-Sori 2009: 152 [♂; distribution]. —Vieira et al. 2009: 257 [distribution]. —Kendrick and Huryn 2014: 280 [distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Mexico, U.S.A.

lometa (Ross, 1941a): 55 [type locality: [United States], New Mexico, High Rolls; INHS; ♂; in *Polytrichia*]. —Denning and Blickle 1972: 142 [checklist]. —Blickle and Denning 1977: 288 [checklist]. —Resh and Sorg 1978: 396 [distribution]. —Blickle 1979: 52, 83 [checklist; ♂]. —Blinn and Ruitter 2005: 69 [distribution; biology]. —Blinn and Ruitter 2006: 33 [biology; distribution; as *lomenta*]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

longispina Bueno-Soria & Holzenthal, 2004: 250 [type locality: Panama, Chiriqui: Fortuna Dam site near Hornitos, 8°55'N, 82°16'W, 1050 m; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 50 [distribution]. —Bueno-Soria 2009: 118 [♂]. —Oláh and Johanson 2011: 229 [distribution]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Panama, Peru.

lucia Denning & Blickle, 1972: 147 [type locality: [United States], Hastings Reservation, Santa Lucia Mountains, Monterey County, California; CAS; ♂; specimen damaged]. —Blickle and Denning 1977: 288, 289 [checklist]. —Blickle 1979: 52, 85 [checklist; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

lupita Bueno-Soria & Santiago-Fragoso, 1997: 368 [type locality: Panama, Chiriqui, Guadalupe Arriba, 8°52'26"N, 82°33'13"W; NMNH; ♂]. —Bueno-Soria 2009: 118 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Jamaica.

machiguenga Flint & Bueno-Soria, 1999: 733 [type locality: Peru, Department Madre de Dios, Province Manu, Pakitza, trail 1, marker 14 (1st stream) MHNJP; ♂]. —*Ochrotrichia* (O.) n. sp. 7: Flint 1996c: 398 —Flint and Bueno-Soria 1999: 733 [to synonymy].

Distribution. —Peru.

maga Oláh & Johanson, 2011: 229 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

malanae Ruiter & Harris, 2015: 324 [type locality: [United States], California, Napa County, Murphy Creek, @ 1010 Shadybrook Lane, 3 mi E Npa, N38.29378, W122.22026; CAS; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

manuensis Flint & Bueno-Soria, 1999: 735 [type locality: Peru, Department Madre de Dios, Province Manu, Pakitza, trail 2, first stream; MHNJP; ♂; ♀]. —de Souza et al. 2014a: 281 [distribution]. —Paprocki and França 2014: 50 [checklist]. —*Ochrotrichia* (O.) n. sp. 5: Flint 1996c: 398 —Flint and Bueno-Soria 1999: 735 [to synonymy].

Distribution. —Brazil, Peru.

marica Flint, 1964: 60 [type locality: Puerto Rico, Maricao Forest, at stone house; NMNH; ♂]. —Flint 1968: 82 [checklist]. —Blickle and Denning 1977: 289 [checklist; as *O. marcia*]. —Botosaneanu 2002b: 86 [checklist].

Distribution. —Puerto Rico.

maya Bueno-Soria & Santiago-Fragoso, 1997: 363 [type locality: Mexico, Chiapas, Cascada de Misolja, 20 km S from Palenque; NMNH; ♂]. —Bueno-Soria 2009: 131 [♂].

Distribution. —Mexico.

maycoba Bueno-Soria & Santiago-Fragoso, 1997: 363 [type locality: Mexico, Sonora, Maycoba River, west of Maycoba; NMNH; ♂]. —Bueno-Soria 2009: 131 [♂].

Distribution. —Mexico.

membrana Bueno-Soria & Holzenthal, 1998: 604 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs, 10°12'96"N, 84°36'42"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 50 [distribution]. —Bueno-Soria 2009: 119 [♂].

Distribution. —Costa Rica.

mono (Ross, 1941a): 55 [type locality: [United States], California, Mono County, Raceway Spring, Hot Creek; INHS; ♂; in *Polytrichia*]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 87 [checklist; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

moselyi Flint, 1972a: 7 [type locality: Mexico, Veracruz, Rio Tacolapan, route 180, km 551; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 203 [distribution]. —Luhman et al. 1999: 126 [pupae parasitized by Hymenoptera: Ceraphronidae; distribution]. —Bueno-Soria et al. 2005: 75 [distribution]. —Poinar and Anderson 2005: 344 [fossil adult parasitized by Hymenoptera: Braconidae]. —Bueno-Soria et al. 2007: 33 [distribution]. —Bueno-Soria and Holzenthal 2008: 50 [distribution]. —Bueno-Soria 2009: 126 [♂]. —Armitage et al. 2016: 10 [distribution]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Guatemala, Mexico, Panama.

myersae Ruiter & Harris, 2015: 325 [type locality: [United States], California, Mono County, Owen's Gorge Spring; EMEC; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

nacora Denning & Blickle, 1972: 145 [type locality: [United States], Humboldt County, California, Bear River; CAS; ♂; specimen damaged]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 85 [checklist; ♂]. —Ruiter and Harris 2015: 331 [♂; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

nematomorpha Cavalcante, Dumas, & Nessimian, 2018: 230 [type locality: Brazil, Rio de Janeiro, Rio de Janeiro, Parque Nacional da Tijuca, Rio Tijuca, Cascatinha Taunay, 22°57'33.7"S 43°16'40.2"W, 407 m; DZRJ; ♂].

Distribution. —Brazil.

nicaragua Bueno-Soria, 2009: 153 [type locality: Nicaragua, Zelaya, Cerro Saslaya, 13°44'N, 85°01'W, 700 m; NMNH; ♂]. —Razo-González 2018: 32 [distribution].

Distribution. —Mexico, Nicaragua.

nimmoi Harris & Armitage, 2015: 13 [type locality: [Panama], Chiriquí Province, Cuenca 108, tributary of Quebrada Grande, at waterfall, Boquete, Valle Escondido, 8.78291°N, 82.44579°W, 1253 m; MIUP; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Panama.

oblongata Bueno-Soria & Santiago-Fragoso, 1992: 443 [type locality: Trinidad, Arima cascade; NMNH; ♂]. —Botosaneanu and Sakal 1992: 202 [distribution; ecology, as *Ochrotrichia* (O.)]. —Botosaneanu and Alkins-Koo 1993: 17 [♂; ♀; distribution]. —Flint 1996b: 93 [distribution]. —Botosaneanu 2002b: 86 [checklist].

Distribution. —Trinidad, Venezuela.

obovata Flint & Sykora, 2004: 38 [type locality: Dominican Republic, [La Vega Province] 20 km S Constanza; NMNH; ♂]. —Pérez-Gelabert 2008: 301 [checklist]/

Distribution. —Dominican Republic

obtecta Flint & Bueno-Soria, 1999: 730 [type locality: Peru, Department Cuzco, Province Paucartambo, Puente San Pedro at km 152, 44 km (road) W of Pilcopata, 13°03.30'S, 71°32.78'W; MHNJP; ♂; ♀].

—*Ochrotrichia* (O.) n. sp. 2: Flint 1996c: 398 —Flint and Bueno-Soria 1999: 730 [to synonymy].

Distribution. —Peru.

okaloosa Harris in Harris and Armitage 1987: 106 [type locality: [United States], Florida, Okaloosa Co., Turkey Creek at Base Road 233, Eglin Air Force Base, 5.0 mile NW Niceville; NMNH; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 9 [checklist].

Distribution. —U.S.A.

okanoganensis Flint, 1965: 171 [type locality: [United States], Washington, Okanogan County, Winthrop; NMNH; ♂]. —Blickle and Denning 1977: 288 [checklist; as *O. okanoganensis*]. —Blickle 1979: 52, 83 [checklist; ♂; as *O. okanoganensis*]. —Bueno-Soria et al. 2007: 33 [distribution; as *O. okanoganensis*].

Distribution. —Mexico, U.S.A.

oldala Oláh & Johanson, 2011: 231 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N, 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

oregona (Ross, 1938a): 121 [type locality: [United States], Oregon, La Grande, along Grande Ronde River; INHS; ♂; in *Polytrichia*]. —Denning 1947a: 147 [♀; distribution]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 85 [checklist; ♂].

Distribution. —U.S.A.

ostoroska Oláh & Johanson, 2011: 232 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

pacifica Flint, 1972a: 6 [type locality: Panama, Chiriqui, Rio Caimito, 16 km NW David; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Holzenthal 1988: 62 [distribution]. —Aguila 1992: 538 [distribution]. —Bueno-Soria et al. 2005: 75 [distribution]. —Bueno-Soria and Holzenthal 2008: 50 [checklist]. —Bueno-Soria 2009: 137 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5 [distribution].

Distribution. —Costa Rica, Mexico, Panama.

palitla Flint, 1972a: 9 [type locality: Mexico, San Luis Potosi, Palitla; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Bueno-Soria 2009: 143 [♂].

Distribution. —Mexico.

palmata Bueno-Soria & Santiago-Fragoso, 1997: 369 [type locality: Mexico, Estado de Mexico, Temascaltepec; CNIN; ♂]. —Bueno-Soria 2009: 138 [♂].

Distribution. —Mexico.

panamensis Flint, 1972a: 10 [type locality: Panama, Chiriqui, Rovira, David; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Aguila 1992: 539 [distribution]. —Chamorro-Lacayo et al. 2007: 43 [distribution]. —Bueno-Soria and Holzenthal 2008: 51 [distribution]. —Bueno-Soria 2009: 153 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Costa Rica, Nicaragua, Panama.

paraldama Bueno-Soria, 2009: 113 [type locality: Panama, San Blas, Río Cartí Grande, 2 km. Nusagandi; NMNH; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Harris and Armitage 2019: 5, 21 [distribution; ♂].

Distribution. —Panama.

patulosa (Wasmund & Holzenthal, 2007): 18 [type locality: Brazil, Rio de Janeiro, Parque Nacional da Serra dos Órgãos, Rio Beija-flor, 22°27'04"S, 43°00'04"W, 1125 m; MZUSP; ♂; ♀; in *Rhyacopsyche*]. —Dumas et al. 2009: 367 [distribution]. —Oláh and Johanson 2011: 234 [to *Ochrotrichia*]. —de Souza et al. 2014a: 281 [distribution]. —Paprocki and França 2014: 50 [checklist].

Distribution. —Brazil.

pectinata Flint, 1972a: 5 [type locality: Mexico, Veracruz, Rio Jamapa, north of Coscomatepec; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Bueno-Soria 2009: 111 [♂].

Distribution. —Mexico.

pectinifera Flint, 1972a: 7 [type locality: Mexico, Veracruz, Fortin de las Flores; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Bueno-Soria 2009: 127 [♂].

Distribution. —Mexico.

phenosa Ross, 1947: 147 [type locality: [United States], Oregon, Deschutes River, Redmond; INHS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 85 [checklist; ♂]. —Mendez et al. 2019: 128 [checklist].

Distribution. —U.S.A.

poblana Bueno-Soria & Santiago-Fragoso, 1997: 370 [type locality: Mexico, Puebla, km 30, route Zacapoaxtla-Zacatlán; CNIN; ♂]. —Bueno-Soria 2009: 154 [♂].

Distribution. —Mexico.

ponta Flint, 1968a: 61 [type locality: Dominica, Pont Casse, 0.4 mi E; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Flint and Sykora 1993: 58 [distribution]. —Botosaneanu 1994a: 37 [distribution]. —Botosaneanu 2002b: 86 [checklist]. —Botosaneanu and Thomas 2005: 44 [distribution].

Distribution. —Dominica, Grenada, Guadeloupe, Martinique, St. Vincent.

pora Angrisano & Sganga, 2009: 62 [type locality: Argentina, Misiones, Parque Provincial Salto Encantado, Salto Acutí; MACN; ♂].

Distribution. —Argentina.

potomus Denning, 1947a: 146 [type locality: [United States], Wyoming, Torrington, North Platte River; ESUW; ♂; ♀]. —Denning 1948: 398 [distribution]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 79 [checklist; ♂]. —Bowles and Mathis 1992: 32 [distribution].

Distribution. —U.S.A.

priapo de Souza, Santos, & Takiya, 2014a: 275 [type locality: Brazil, Bahia, Igrapiúna, Reserva Ecológica da Michelin, Mata da Vila 5, 13°49'22.6"S, 39°12'6.5"W, 87 m; DZRJ; ♂].

Distribution. —Brazil. —Paprocki and França 2014: 52 [checklist].

provosti Blickle, 1961: 132 [type locality: [United States], Florida, Temple Terrace; INHS; ♂; in *Neotrichia*]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 79 [checklist; ♂]. —Pescador et al. 2004: 133 [checklist]. —Harris et al. 2012: 9 [checklist].

Distribution. —U.S.A.

pulgara Harris & Armitage, 2015: 13 [type locality: [Panama], Chiriquí Province, Cuenca 108, tributary of Quebrada Grande, at waterfall, Boquete, Valle Escondido, 8.78291°N, 82.44579°W, 1253 m; MIUP; ♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution].

Distribution. —Panama.

puposa Oláh & Johanson, 2011: 234 [type locality: Peru, San Martin Prov., La Catarata de Ahuashiyascu, 6°27.544'S 76°18.192'W; NHRS; ♂].

Distribution. —Peru.

puyana Bueno-Soria & Santiago-Fragoso, 1992: 440 [type locality: Ecuador, Pastaza Prov., Puyo; NMNH; ♂]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador.

quadrispina Denning & Blickle, 1972: 150 [type locality: [United States], Southwest Research Station, Portal, Cochise County, Arizona; CAS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 81 [checklist; ♂]. —Moulton et al. 1994: 170 [distribution]. —Keiper and Walton 2000: 183 [larva]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

quasi Bueno-Soria & Holzenthal, 2008: 46 [type locality: Costa Rica, San José, Río Savegra, San Gerardo de Dota, 9.33°N, 83.48°W, 2200 m; CMNH; ♂].

Distribution. —Costa Rica.

quebrada Bueno-Soria & Holzenthal, 1998: 607 [type locality: Costa Rica, Guanacaste, P. N. Rincón de la Vieja, Quebrada Zopilote, 10°45'9"N, 83°18'54"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 51 [distribution]. —Bueno-Soria 2009: 119 [♂].

Distribution. —Costa Rica.

quinealensis Bueno-Soria & Holzenthal, 1998: 611 [type locality: Costa Rica, Puntarenas, Río Guineal, ca. 1 km (air) E Finca Helechales, 9°4'56"N, 83°5'52"W;

NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 51 [distribution]. —Bueno-Soria 2009: 138 [♂]. —Armitage et al. 2020: 5 [distribution].

Distribution. —Costa Rica, Panama.

ramona Bueno-Soria & Holzenthal, 1998: 610 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs, 10°12'96"N, 84°36'42"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 52 [distribution]. —Bueno-Soria 2009: 146 [♂]. —Armitage et al. 2016: 11 [distribution]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Costa Rica, Panama.

raposa Bueno-Soria & Santiago-Fragoso, 1992: 440 [type locality: Colombia, Dept. Valle del Cauca, Río Raposo; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Colombia, Ecuador.

regina Bueno-Soria & Santiago-Fragoso, 1997: 368 [type locality: Panama, Barro Colorado Island, Snyder-Molino Trail, Marker 3; NMNH; ♂]. —Bueno-Soria 2009: 120 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist].

Distribution. —Panama.

regiomontana Bueno-Soria & Holzenthal, 2004: 255 [type locality: Mexico, Nuevo Leon, Municipio Santiago, Potrero Redondo; CNIN; ♂]. —Bueno-Soria 2009: 155 [♂].

Distribution. —Mexico.

riesi Ross, 1944: 132 [type locality: [United States], Illinois, Utica, Split Rock Brook; INHS; ♂; ♀]. —Blickle and Denning 1977: 288 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 52, 81 [checklist; ♂]. —Waltz and McCafferty 1983a: 11 [distribution]. —Harris et al. 1984: 109 [distribution]. —Harris et al. 1991: 232 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 118 [♂; distribution]. —Houp 1999: 2 [distribution]. —Etnier 2010: 486 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

robisoni Frazer & Harris, 1991a: 364 [type locality: [United States], Arkansas, Perry County, Bear Creek at State Highway 7, two miles south of Hollis; NMNH; ♂]. —Moulton and Stewart 1996: 119 [♂; distribution]. —Etnier 2010: 486 [distribution].

Distribution. —U.S.A.

rothi Denning & Blickle, 1972: 149 [type locality: [United States], Ariz[ona], Southwest Research Stations, Cochise County, Portal CAS; ♂; ♀]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 83 [checklist; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Bueno-Soria 2009: 152 [♂]. —Ruiter and Harris 2015: 329 [♂; distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Mexico, U.S.A.

sagitta Cavalcante, Dumas, & Nessimian, 2018: 232 [type locality: Brazil, Rio de Janeiro, Rio de Janeiro, Parque Nacional da Tijuca, Rio Cova da Onça, 22°57'45.2"S, 43°17'36.5"W, 494 m; DZRJ; ♂].

Distribution. —Brazil.

salaris Blickle & Denning, 1977: 289 [type locality: [United States], California, Lake County, Butts Creek, Butts Canyon, 0.5 mile S. E. Black Oakes Villa, 825'; CAS; ♂]. —Blickle 1979: 52, 85 [checklist; ♂]. —Mendez et al. 2019: 118 [checklist].

Distribution. —U.S.A.

seiba Flint & Sykora, 2004: 38 [type locality: Dominican Republic, El Seibo Province, Pedro Sanchez, small stream; FSCA; ♂; ♀]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic.

serra Botosaneanu, 1991: 125 [type locality: Haiti, Département de l'Ouest, Ville Bonheur, Le Saut d'Eau; ZMUA; ♂]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Flint and Sykora 2004: 39 [distribution]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Haiti.

serrana Bueno-Soria & Santiago-Fragoso, 1997: 370 [type locality: Mexico, Guerrero, Acahuizotla, 10 km E of Chilpancingo; CNIN; ♂]. —Bueno-Soria 2009: 156 [♂].

Distribution. —Mexico.

shawnee (Ross, 1938a): 120 [type locality: [United States], Illinois, Herod; INHS; ♂; in *Polytrichia*]. —Ross 1944: 131 [♂; distribution]. —Morse and Blickle 1953: 72 [distribution]. —Blickle and Denning 1977: 288 [checklist]. —Etnier and Schuster 1979: 18 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Harris et al. 1991: 233 [distribution]. —Frazer and Harris 1991a: 366–367 [♂]. —Masteller and Flint 1992: 70 [distribution]. —Moulton and Stewart 1996: 119 [♂; distribution].

Distribution. —U.S.A.

silva Bueno-Soria & Holzenthal, 1998: 606 [type locality: Costa Rica, Alajuela, Reserva Forestal San Ramón, Río San Lorencito and tribs, 10°12'96"N, 84°36'42"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 52 [distribution]. —Bueno-Soria 2009: 121 [♂].

Distribution. —Costa Rica.

spina Bueno-Soria & Holzenthal, 2004: 254 [type locality: Mexico, Veracruz, Puente Río Jamapa, Route Coscomatepec-Huatusco, 1320 m; CNIN; ♂]. —Bueno-Soria 2009: 156 [♂].

Distribution. —Mexico.

spinosa (Ross, 1938a): 121 [type locality: [United States], Oklahoma, Turner Falls State park, along Honey Creek; INHS; ♂; in *Polytrichia*]. —Ross 1944: 132 [♂; ♀; distribution]. —Etnier 1968: 191 [distribution]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 85 [checklist; ♂]. —Swegman et al. 1981: 139 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Masteller and Flint 1992: 70 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton

and Stewart 1996: 119 [♂; distribution]. —Keiper and Foote 2000: 226 [biology; distribution]. —Houghton et al. 2001: 505 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2011b: 5 [phenology; habitat; distribution]. —Houghton et al. 2011a: 387, 388 [distribution; biology]. —Houghton et al. 2017: 63 [checklist].

Distribution. —U.S.A.

spinosissima Flint, 1964: 58 [type locality: Puerto Rico, Toro Negro Forest, near Dona Juana area; NMNH; ♂]. —Flint 1968a: 59 [♂; ♀; distribution]. —Blickle and Denning 1977: 289 [checklist]. —Flint and Sykora 1993: 50 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Botosaneanu and Thomas 2005: 44 [distribution].

Distribution. —Dominica, Martinique, Puerto Rico.

spinula Bueno-Soria & Holzenthal, 2004: 255 [type locality: Mexico, Chiapas, Reserva de la Biosfera El Triunfo; CNIN; ♂]. —Bueno-Soria 2009: 157 [♂].

Distribution. —Mexico.

spinulata Denning & Blickle, 1972: 149 [type locality: [United States], Ariz[ona], Portal, Cochise County; CAS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 52, 81 [checklist; ♂]. —Moulton and Stewart 1997: 350 [checklist]. —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2005: 69 [biology; distribution]. —Blinn and Ruiter 2006: 33 [biology; distribution]. —Bueno-Soria et al. 2007: 33 [distribution]. —Bueno-Soria 2009: 146 [♂].

Distribution. —Mexico, U.S.A.

spinulosa Bueno-Soria, 2009: 124 [type locality: Mexico, Estado de México, Temascaltepec Real de Arriba, 19°02'24"N, 100°02'47"W, 1720 m; CNIN; ♂].

Distribution. —Mexico.

spira Thomson & Holzenthal, 2012: 27 [type locality: Venezuela, Monagas, Guachero Cave National Park, 10°10.322'N, 63°33.315'W, 1110 m; UMSP; ♂].

Distribution. —Venezuela.

stylata (Ross, 1938a): 120 [type locality: United States, Wyoming, Farson, Little Sandy Creek; INHS; ♂; in *Polytrichia*]. —Denning 1947b: 171 [distribution]. —Denning 1947a: 146 [distribution]. —Flint 1972a: 5 [♂; distribution]. —Denning and Blickle 1972: 143 [checklist]. —Blickle and Denning 1977: 288 [checklist]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Blickle 1979: 52, 87 [checklist; ♂]. —Frazer and Harris 1991a: 366–367 [♂]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1994: 170 [distribution]. —Moulton and Stewart 1996: 120 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Ruiter 1999: 165 [distribution]. —Houghton 2001: 90 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 333 [distribution; biology]. —Bowles et al. 2007: 22 [distribution; biology]. —Bueno-Soria et al. 2007: 33 [distribution]. —Bueno-Soria 2009: 139 [♂]. —Blinn and Ruiter 2009a: 303 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Razo-González 2018: 32 [distribution]. —Barba-Álvarez et al. 2019: 86 [distribution]. —Mendez et al. 2019: 118 [checklist].

Distribution. —Guatemala, Mexico, U.S.A.

susanae Flint & Herrmann, 1976: 894 [type locality: United States, Colorado, Chaffee Co., Trout Creek Spring; NMNH; ♂]. —Blickle 1979: 52, 81 [checklist; ♂].

Distribution. —U.S.A.

tagala Flint, 1972a: 8 [type locality: Guatemala, Huehuetenango, 32 km NW Huehuetenango; NMNH; ♂]. —Blickle and Denning 1977: 289 [checklist]. —Maes and Flint 1988: 4 [distribution]. —Maes 1999: 1194 [checklist]. —Bueno-Soria et al. 2005: 75 [checklist]. —Chamorro-Lacayo et al. 2007: 43 [distribution]. —Bueno-Soria and Holzenthal 2008: 52 [distribution]. —Bueno-Soria 2009: 128 [♂; distribution].

Distribution. —Costa Rica, Guatemala, Mexico, Nicaragua.

tarsalis (Hagen, 1861): 275 [type locality: Canada (Osten Sacken), St. Lawrence River; MCZ; ♂; in *Hydroptila*]. —Eaton 1873: 148 [comments on general appearance]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 160 [checklist]. —Ross 1938b: 10 [lectotype designated; in *Polytrichia*]. —Ross 1944: 130 [♂; ♀; distribution]. —Etnier 1965: 147 [distribution]. —Unzicker et al. 1970: 172 [distribution]. —Flint 1972a: 6 [♂; distribution]. —Denning and Blickle 1972: 143 [checklist]. —Edwards 1973: 506 [distribution; as *tarsialis*]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Resh et al. 1978: 383 [distribution]. —Blickle 1979: 53, 79 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Harris et al. 1982a: 511 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Waltz and McCafferty 1983a: 11 [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Harris et al. 1984: 109 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Tarter 1990: 239 [checklist]. —Harris et al. 1991: 234 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Frazer and Harris 1991a: 366–367 [♂]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton et al. 1994: 170 [distribution]. —Moulton and Stewart 1996: 120 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton and Stewart 1998: 105 [biology; distribution]. —Ruiter 1999: 165 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Baumgardner and Bowles 2005: 11 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Bueno-Soria et al. 2005: 75 [distribution]. —Blinn and Ruiter 2006: 333 [biology; distribution]. —Zeullig et al. 2006: 43 [distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Blinn and Ruiter 2009a: 304 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Flint et al. 2009: 7 [distribution]. —Bueno-Soria 2009: 139 [♂]. —Flint 2011: 104 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Myers et al. 2011: 108 [distribution]. —Harris et al. 2012: 9 [checklist]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Houghton et al. 2017: 63 [checklist]. —Barba-Álvarez et al. 2019: 86 [distribution]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, Mexico, U.S.A.

taunay Cavalcante, Dumas, & Nessimian, 2018: 232 [type locality: Brazil, Rio de Janeiro, Rio de Janeiro, Parque Nacional da Tijuca, Rio Tijuca, Cascatinha Taunay, 22°57'33.7"S, 43°16'40.2"W, 407 m; DZRJ; ♂].

Distribution. —Brazil.

tenanga (Mosely, 1937b): 185 [type locality: Mexico, Chiapas, Saltenango de la Paz; NHMUK; ♂; in *Polytrichia*]. —Ross 1944: 276 [♂; in *Ochrotrichia*]. —Flint 1972a: 8 [♂; distribution]. —Blickle and Denning 1977: 289 [checklist]. —Bueno-Soria and Flint 1978: 204 [distribution]. —Flint 1981: 29 [♂; distribution]. —Holzenthal 1988: 62 [distribution]. —Flint and Reyes 1991: 487 [distribution]. —Aguila 1992: 538 [distribution]. —Bueno-Soria and Holzenthal 2008: 52 [distribution]. —Bueno-Soria 2009: 144 [♂]. —Armitage et al. 2015a: 7 [checklist]. —Armitage and Harris 2018b: 98 [checklist]. —Armitage and Harris 2018c: 283 [distribution]. —Harris and Armitage 2019: 5 [distribution]. —Barba-Álvarez et al. 2019: 86 [distribution].

Distribution. —Costa Rica, Guatemala, Honduras, Mexico, Panama, Peru, Venezuela.

tenuata Blickle & Denning, 1977: 293 [type locality: [United States], Oregon, Douglas County, Myrtle Creek; EMEC; ♂; ♀]. —Blickle 1979: 52, 87 [checklist; ♂]. —Ruiter and Harris 2015: 333 [♂; distribution]. —Mendez et al. 2019: 119 [checklist].

Distribution. —U.S.A.

transylvanica Harris & Floyd in Floyd et al. 1997: 140 [type locality: [United States], North Carolina, Transylvania County, Corbin Creek, 1.5 mile N Whitewater River bridge at SR 281, ca. 910 m; NMNH; ♂].

Distribution. —U.S.A.

trapoiza Ross, 1947: 146 [type locality: [United States], Colorado, Buena Vista, sweeping marsh at Yale Lake; INHS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 53, 81 [checklist; ♂]. —Mendez et al. 2019: 119 [checklist].

Distribution. —U.S.A.

trinitatis Flint, 1996b: 93 [type locality: Trinidad, streamlet below Maracas Waterfall, 250 m, 10°44'N, 61°24'W; NMNH; ♂]. —Botosaneanu 1997: 45 [♂; as undescribed species]. —Botosaneanu 2002b: 87 [checklist].

Distribution. —Trinidad.

tuscaloosa Harris & Kelley, 1984a: 572 [type locality: [United States], Alabama, Tuscaloosa County, Tyro Creek, 4 miles southeast of Berry; NMNH; ♂; ♀].

Distribution. —U.S.A.

unica Bueno-Soria & Santiago-Fragoso, 1992: 443 [type locality: Colombia, Dept. Valle del Cauca, Rio Raposo; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Armitage et al. 2020: 5 [distribution].

Distribution. —Colombia, Panama.

unicornia Bueno-Soria & Holzenthal, 2004: 256 [type locality: Mexico, Oaxaca, Santa Maria de Yavesia (water plant), 17°13'36"N, 96°25'35"W, 1930 m; CNIN; ♂]. —Bueno-Soria 2009: 122 [♂].

Distribution. —Mexico.

unio (Ross, 1941a): 56 [type locality: [United States], Illinois, Alto Pass, Union Spring; INHS; ♂; in *Polytrichia*]. —Ross 1944: 129 [♂; larva; distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 53, 79 [checklist]; ♂]. —Mathis and Bowles 1992: 24 [distribution]. —Moulton and Stewart 1996: 120 [♂; distribution].

Distribution. —U.S.A.

velascoi Bueno-Soria & Santiago-Fragoso, 1997: 371 [type locality: Mexico, Guerrero, route 134, 102 km N.W. Zihuatanejo; CNIN; ♂]. —Bueno-Soria 2009: 157 [♂].

Distribution. —Mexico.

verda Flint, 1968c: 153 [type locality: Puerto Rico, el Verde; NMNH; ♂]. —Flint 1968a: 82 [checklist]. —Blickle and Denning 1977: 289 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Flint and Sykora 2004: 40 [distribution]. —Pérez-Gelabert 2008: 301 [checklist].

Distribution. —Dominican Republic, Puerto Rico.

vertreesi Denning & Blickle, 1972: 149 [type locality: [United States], 7 miles west of Roseburg, Douglas County, Oregon, North Umpqua River; CAS; ♂; specimen damaged]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 53, 87 [checklist; ♂]. —Ruiter and Harris 2015: 333 [♂; distribution]. —Mendez et al. 2019: 119 [checklist].

Distribution. —U.S.A.

vieja Bueno-Soria & Holzenthal, 1998: 610 [type locality: Costa Rica, Guanacaste, P.N. Rincón de la Vieja, Quebrada Provisión, 10°46'14"N, 85°16'86"W; NMNH; ♂]. —Bueno-Soria and Holzenthal 2008: 53 [distribution]. —Bueno-Soria 2009: 147 [♂].

Distribution. —Costa Rica.

villarenia Botosaneanu, 1980: 108 [type locality: Cuba, Prov. Las Villas, Cafetal <<Gaviña>>, La Sierrita; ZMUA; ♂]. —Botosaneanu 1979: 48 [distribution]. —Kumanski 1987: 18 [distribution]. —Flint 1996a: 16 [checklist]. —Botosaneanu 2002b: 87 [checklist]. —Naranjo López and González Lazo 2005: 149 [checklist].

Distribution. —Cuba.

weddleae Ross, 1944: 274 [type locality: [United States], Oklahoma, Cloudy Creek near Cloudy; INHS; ♂; ♀]. —Unzicker et al. 1970: 172 [distribution; as *weedleae*]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 53, 79 [checklist; ♂]. —Bowles and Mathis 1989: 239 [distribution; as *weedleae*]. —Bowles and Mathis 1992: 32 [distribution; as *weedleae*]. —Moulton and Stewart 1996: 121 [♂; distribution]. —Etnier 2010: 486 [distribution].

Distribution. —U.S.A.

weoka Harris, 1989: 313 [type locality: [United States], Alabama, Elmore County, Fisher Creek on unmarked county road, 3.5 miles southwest Weoka, T20N, R18E, S36; NMNH; ♂]. —Harris et al. 1991: 236 [distribution]. —Roble et al. 2019: 43 [distribution].

Distribution. —U.S.A.

wojcickyi Blickle, 1963: 20 [type locality: [United States], Maine, Dennistown; INHS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 53, 83 [checklist; ♂]. —Swegman et al. 1981: 139 [distribution]. —Parker and Voshell 1981: 4 [checklist]. —Huryn and Foote 1983: 791 [distribution]. —Light and Adler 1983: 77 [distribution; biology]. —Waltz and McCafferty 1983a: 11 [distribution]. —Usis and Foote 1989: 84 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Keiper et al. 1998a: 256 [use of algae in case construction]. —Keiper and Foote 2000: 226 [biology; distribution]. —Armitage et al. 2011: 14 [checklist].

Distribution. —U.S.A.

xena (Ross, 1938a): 122 [type locality: [United States], Illinois, Herod, along Gibbons Creek; INHS; ♂; in *Polytrichia*]. —Ross 1944: 130 [♂; ♀; distribution]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 53, 79 [checklist; ♂]. —Waltz and McCafferty 1983a: 11 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Moulton and Stewart 1996: 121 [♂; distribution]. —Keiper and Foote 1998: 594 [biology; distribution]. —Keiper 1999: 231 [larva]. —Etnier 2010: 486 [distribution]. —Armitage et al. 2011: 14 [checklist].

Distribution. —U.S.A.

yanayacuana Bueno-Soria & Santiago-Fragoso, 1992: 443 [type locality: Ecuador, Tungurahua Prov., Yanayacu; NMNH; ♂]. —Ríos-Touma et al. 2017: 10 [checklist].

Distribution. —Ecuador.

yavapai Ruiter & Harris, 2015: 327 [type locality: [United States], Arizona, Yavapai County, Red Tank Draw on FR 618, ephemeral stream near Beaver Creek, Ranger Station N34° 40.7', W111° 43.4'; CAS; ♂].

Distribution. —U.S.A.

yavesia Bueno-Soria & Holzenthal, 2004: 256 [type locality: Mexico, Oaxaca, Santa Maria de Yavesia (water plant), 17°13'36"N, 96°25'35"W, 1930 m; CNIN; ♂]. —Bueno-Soria 2009: 158 [♂]. —Razo-González et al. 2020: 5 [distribution].

Distribution. —Mexico.

yepachica Harris in Harris and Moulton 1993: 548 [type locality: Mexico, Chihuahua, Río Concheno at Hwy 16, 12 km SW Yepachic; NMNH; ♂]. —Bueno-Soria 2009: 128 [♂].

Distribution. —Mexico.

yetla Bueno-Soria, 2009: 129 [type locality: Mexico, Oaxaca, San Mateo Yetla, 17°.75N, 96°.4W, 840 m; CNIN; ♂].

Distribution. —Mexico.

zihuaquia Bueno-Soria & Santiago-Fragoso, 1997: 362 [type locality: Mexico, Guerrero, route 134, 102 km N.W. Zihuatanejo; CNIN; ♂]. —Bueno-Soria 2009: 132 [♂].

Distribution. —Mexico.

zioni Denning & Blickle, 1972: 143 [type locality: [United States], Zion Canyon National Park, Utah; CAS; ♂]. —Blickle and Denning 1977: 288 [checklist]. —Blickle 1979: 53, 81 [checklist; ♂].

Distribution. —U.S.A.

Genus *Ragatrichia* Oláh & Johanson, 2011

Ragatrichia Oláh & Johanson, 2011: 239 [type species: *Ragatrichia ragada* Oláh & Johanson, 2011, original designation].

The genus *Ragatrichia* includes five species recorded from French Guiana and Argentina. The original description placed the genus near *Metrichia* (Oláh and Johanson 2011). Differences in the form of the male genitalia are used to separate the two genera; the presence of a “harpago” on the inferior appendage of *Ragatrichia* male genitalia is unique within Hydroptilidae (Oláh and Johanson 2011). Larvae have been described for *R. yatay* as *Rhyacopsyche* (Angrisano 2002).

angrisanae Oláh & Johanson, 2011: 240 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 66 m; NHRS; ♂].

Distribution. —French Guiana.

dietzi (Flint, 1974b): 63 [type locality: Guyana, Rockstone, Essequibo River; NMNH; ♂; in *Ochrotrichia*]. —Oláh and Johanson 2011: 241 [to *Ragatrichia*; distribution].

Distribution. —French Guiana, Guyana, Suriname.

garuhape (Angrisano & Sganga, 2009): 63 [type locality: Argentina, Misiones: Parque Provincial Salto Encantado; MACN; ♂ in *Rhyacopsyche*]. —Oláh and Johanson 2011: 242 [to *Ragatrichia*].

Distribution. —Argentina.

ragada Oláh & Johanson, 2011: 242 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

yatay (Angrisano, 1989): 157 [type locality: Argentina, Entre Rios, Parque Nacional El Palmar; MACN; ♂; ♀; in *Rhyacopsyche*]. —Angrisano 1999: 35 [checklist]. —Angrisano 2002: 402 [larva; pupa; case; biology; taxonomic remarks]. —Angrisano and Sganga 2007: 31 [♂; larva; distribution]. —Wasmund and Holzenthal 2007: 21 [♂; illustrations after Angrisano 1989]. —Oláh and Johanson 2011: 243 [to *Ragatrichia*].

Distribution. —Argentina.

Genus *Rhyacopsyche* Müller, 1879

Rhyacopsyche Müller, 1879b: 40 [*nomen nudum*]; 1879: 143 [type species: *Rhyacopsyche hagenii* Müller, 1879b, monotypic]. —Müller 1880b: 121. —Müller 1880a: 72. —Flint 1971: 516 [definition; revision]. —Marshall 1979b: 187 [generic review]. —Flint 1991b: 59 [key to Antioquian species]. —Angrisano 2002: 403 [taxonomic remarks]. —Wasmund and Holzenthal 2007: 1 [revision; key to species]. —Oláh and Johanson 2011: 203 [re-description].

Rhyacopsyche includes 30 species occurring primarily in Central and South America. The genus was originally established for a single Brazilian species that was described solely on

the basis of larval cases. The species was subsequently named *hagenii* (Müller 1879b). Descriptions of the adults and larvae were first published by Thienemann (1905). According to Flint's (1971) description of the genus, the larvae of *Rhyacopsyche* are very similar to those of both *Ochrotrichia* and *Hydroptila*, and the adults are similar to *Metrichia* and can only be separated using features of the male and female genitalia. Larvae have been described for *R. hagenii* (Thienemann, 1905), *R. mexicana* (Flint, 1971), and *R. mutisi* (Mey and Joost 1990); a generic diagnosis of the larva was provided by Wasmund and Holzenthal (2007).

andina Flint, 1991b: 61 [type locality: Colombia, Dpto. Antioquia, Quebrada la Agudelo, 2 km E El Retiro; NMNH; ♂]. —Flint 1996c: 397 [distribution]. —Muñoz-Quesada 2000 [278 [checklist]]. —Wasmund and Holzenthal 2007: 7 [♂; distribution].

Distribution. —Colombia, Peru, Venezuela.

angra Santos, Jardim, & Nessimian, 2011: 817 [type locality: Brazil, Rio de Janeiro, Angra dos Reis, 23°00'23"S 44°29'15"W, 40 m; DZRJ; ♂]. —Paprocki and França 2014: 54 [checklist].

Distribution. —Brazil.

benwa Wasmund & Holzenthal, 2007: 8 [type locality: Peru, Madre de Dios, Manu, Pakitza, 250 m; MHNJP; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Bolivia, Ecuador, Peru.

bulbosa Wasmund & Holzenthal, 2007: 8 [type locality: Brazil, Rio de Janeiro, Nova Friburgo, municipal water supply, 950 m; MZUSP; ♂]. —Dumas et al. 2009: 366 [distribution]. —Calor 2011: 321 [checklist]. —Dumas and Nessimian 2012: 15 [checklist]. —Paprocki and França 2014: 54 [checklist].

Distribution. —Brazil.

bunkotala Oláh & Johanson, 2011: 244 [type locality: Ecuador, Wild Sumaco, near Pacto Sumaco; Collection Oláh; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

chichotla Bueno-Soria & Hamilton, 1986: 303 [type locality: Mexico, Oaxaca, 7 km NE Huautla de Jimenez; NMNH; ♂]. —Wasmund and Holzenthal 2007: 9 [♂; re-description].

Distribution. —Mexico.

colei Wasmund & Holzenthal, 2007: 9 [type locality: Venezuela, Lara, Parque Nacional Dinira, Quebrada Buenos Aires, 09°36'24"N 70°04'11"W, 1850 m; UMSP; ♂].

Distribution. —Venezuela.

colombiana Wasmund & Holzenthal, 2007: 10 [type locality: Colombia, Valle Del Cauca, Municipio El Cerrito, Rio Cerrito, 7.1 km E. Hacienda “El Paraiso”, 03°38'59"N 76°09'10"W, 1950 m; UMSP; ♂].

Distribution. —Colombia.

colubrinosa Wasmund & Holzenthal, 2007: 11 [type locality: Peru, Cuzco, Paucartambo to Pilcopata Rd., streamlet 50 m E Quiacalzón, 13°01.57'S 71°29.97'W, 1050 m; MHNJP; ♂; ♀]. —Oláh and Johanson 2011: 244 [checklist]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador, Peru.

diacantha Santos, Jardim, & Nessimian, 2011: 815 [type locality: Brazil, Pará, PArauapebas (Área de Proteção Ambiental do Igarapé Gelado, Barragem do Gelado, 05°57'56"S 50°13'00"W, 224 m; DZRJ; ♂; ♀]. —Paprocki and França 2014: 54 [checklist].

Distribution. —Brazil.

dikrosa Wasmund & Holzenthal, 2007: 11 [type locality: Brazil, São Paulo, Pedregulho, 140 km NE Ribeirão Preto; MZUSP; ♂; ♀]. —Dumas et al. 2009: 366 [distribution]. —Calor 2011: 321 [checklist]. —Dumas and Nessimian 2012: 16 [checklist]. —Paprocki and França 2014: 55 [checklist].

Distribution. —Brazil.

duplicispina Flint, 1996b: 91 [type locality: Tobago, Bridge B1/5, 6.5 km N Roxborough; NMNH; ♂]. —Botosaneanu 2002b: 89 [checklist]. —Wasmund and Holzenthal 2007: 12 [♂; re-description].

Distribution. —Tobago.

flinti Wasmund & Holzenthal, 2007: 13 [type locality: Venezuela, Guárico, Parque Nacional Guatopo, Queb. Guatopo, 0.5 km N Est. La Colina, 10°0'50"N 66°21'47"W, 600 m; UMSP; ♂; ♀].

Distribution. —Venezuela.

hagenii Müller, 1879a: 143 [type locality: Brazil; type depository unknown; larval and pupal cases]. —Thienemann 1905: 287 [larva; ♂]. —Müller 1921: 525 [larva]. —Ulmer 1957: 172, 187 [literature; key to larval genus]. —Angrisano 1995a: 509 [distribution]. —Angrisano 1999: 35 [checklist]. —Paprocki et al. 2004: 12 [checklist]. —Wasmund and Holzenthal 2007: 6 [♂; ♀; distribution]. —Dumas et al. 2009: 366 [distribution]. —Calor 2011: 321 [checklist]. —Dumas and Nessimian 2012: 16 [checklist]. —Paprocki and França 2014: 55 [checklist].

Distribution. —Argentina, Brazil, Uruguay.

hajtoka Oláh & Johanson, 2011: 245 [type locality: Ecuador, Alambi; Collection Oláh; ♂]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador.

hasta Wasmund & Holzenthal, 2007: 13 [type locality: Peru, Cuzco, Paucartambo to Pilcopata rd., streamlet 50 m E Quiacalzón, 13°01.57'S 71°29.97'W, 1050 m; MHNJP; ♂]. —Oláh and Johanson 2011: 247 [checklist].

Distribution. —Peru.

holzenthali Harris & Armitage, 2019: 17 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91627°N and 82.15469°W, 120 m; COZEM; ♂]. —Armitage and Harris 2020a: 8 [distribution].

Distribution. —Panama.

intraspira Wasmund & Holzenthal, 2007: 14 [type locality: Peru, Cuzco, Paucartambo to Pilcopata rd., Rio San Pedro at Puente San Pedro, 13°03.30'S 71°32.78'W, 1445 m; MHNJP; ♂].

Distribution. —Peru.

jimena Flint, 1991b: 59 [type locality: Colombia, Dpto. Antioquia, Quebrada la Jimenez, Sopetran; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Wasmund and Holzenthal 2007: 14 [♂; re-description].

Distribution. —Colombia.

matthiasi Flint, 1991: 61 [type locality: Colombia, Dpto, Antioquia, Urrao; NMNH; ♂]. —Muñoz-Quesada 2000: 278 [checklist]. —Wasmund and Holzenthal 2007: 15 [♂; re-description]. —Mey and Ospina-Torres 2018: 30 [distribution].

Distribution. —Colombia.

mexicana (Flint, 1967b): 12 [type locality: Mexico, Veracruz, Rio Tacolapan; NMNH; ♂; in *Metrichia*]. —Flint 1971: 519 [♂; ♀; larva; case; distribution; to *Rhyacopsyche*]. —Bueno-Soria and Flint 1978: 205 [distribution]. —Maes 1999: 1195 [checklist]. —Bueno-Soria et al. 2005: 75 [distribution]. —Chamorro-Lacayo et al. 2007: 44 [checklist]. —Wasmund and Holzenthal 2007: 15 [♂; re-description].

Distribution. —Costa Rica, Guatemala, Mexico, Nicaragua.

mutisi Mey & Joost, 1990: 134 [type locality: Colombia, Dept, Tolima, Mariquita, Rio Medina; KMUL; ♂; ♀; larva; case]. —Muñoz-Quesada 2000: 278 [checklist]. —Wasmund and Holzenthal 2007: 16 [♂; re-description].

Distribution. —Colombia.

obliqua Flint, 1971: 523 [type locality: Mexico, Veracruz, Fortin de las Flores; NMNH; ♂; ♀]. —Bueno-Soria and Flint 1978: 205 [distribution]. —Wasmund and Holzenthal 2007: 16 [♂; re-description]. —Armitage and 2018a: 9 [distribution]. —Armitage and Harris 2018b: 99 [checklist]. —Armitage and Harris 2018c: 284 [distribution].

Distribution. —Mexico, Panama.

peruviana Flint, 1975: 568 [type locality: South-Peru, Sivia; ZSZMH; ♂; ♀]. —Wasmund and Holzenthal 2007: 18 [♂; re-description; distribution]. —Ríos-Touma et al. 2017: 11 [checklist].

Distribution. —Ecuador, Peru.

rhamphisa Wasmund & Holzenthal, 2007: 19 [type locality: Colombia, Valle, Del Cauca, Municipio El Cerrito, Rio Cerrito, 7.1 kms E. Hacienda “El Paraiso”. 03°38'59"N 076°09'10"W, 1950 m; UMSP; ♂; ♀]. —Oláh and Johanson 2011: 248 [distribution]. —Armitage et al. 2018: 5 [distribution; as *ramphisa*].

Distribution. —Colombia, Costa Rica, Panama, Peru.

shorti Thomson & Holzenthal, 2012: 36 [type locality: Venezuela, Bolívar, Gran Sabana, E. Pauji, “Río Curvita”, 4°31.237'N, 61°31.591'W, 869 m; UMSP; ♂]. —Morse 2016 [listed as *Angrisanoia* on the Trichoptera World Checklist].

Distribution. —Venezuela.

tanylobosa Wasmund & Holzenthal, 2007: 19 [type locality: Venezuela, Barinas, Parque Nacional Sierra Nevada, Queb. San Juan in Sta. Rosa, 08°27.87'N 070°50.92'W, 1000 m; UMSP; ♂; ♀]. —Ríos-Touma et al. 2017: 11 [distribution].

Distribution. —Ecuador, Peru, Venezuela.

torulosa Flint, 1971: 521 [type locality: Guatemala, Escuintla, Rio Metapa, 10 km SE Escuintla; NMNH; ♂; ♀]. —Holzenthall 1988: 63 [distribution]. —Wasmund and Holzenthall 2007: 20 [♂; re-description]. —Armitage et al. 2018: 5 [distribution]. —Bueno-Soria and Barba-Alvarea 2018: 367 [distribution].

Distribution. —Costa Rica, Guatemala, Mexico, Panama.

totuma Thomson & Armitage, 2018: 5 [type locality: Panama, Chiriquí Province, Cuenca 102 (Río Chiriquí Viejo), Quebrada Norte, Mount Totumas Biological Reserve, 8.873613°N, 82.690512°W; COZEM; ♂].

Distribution. —Panama.

turrialbe Flint, 1975: 523 [type locality: Costa Rica, Cartago, Citaria; NMNH; ♂; ♀]. —Holzenthall 1988: 63 [distribution]. —Wasmund and Holzenthall 2007: 21 [♂; re-description]. —Armitage et al. 2018: 5 [distribution].

Distribution. —Costa Rica, Panama.

Subfamily ORTHOTRICHINIAE Nielsen, 1948

Orthotrichini Nielsen, 1948: 186 [type genus: *Orthotrichia* Eaton, 1873]. —Marshall 1979b: 212 [reviewed as tribe Orthotrichini].

While currently containing three genera, the subfamily Orthotrichinae was originally established for *Orthotrichia* and *Ithytrichia* based on several morphological and behavioral affinities of the larvae (Nielsen 1948). However, as noted by Marshall (1979b), the adults and larvae of each of these two genera are very distinct from one another and they may later be found to form distinct groups of their own. The third genus, *Saranganotrichia*, shows closest morphological similarities to *Ithytrichia*, with which it was synonymized by Marshall (1979b). Larval descriptions have been provided for all genera.

Genus *Ithytrichia* Eaton, 1873

Ithytrichia Eaton, 1873: 139 [type species: *Ithytrichia lamellaris* Eaton, 1873, original designation]. —McLachlan 1880: 514 [revision]. —Ross 1944: 123 [revision of North American species]. —Marshall 1979b: 216 [generic review]. —Blickle 1979: 6 [key to species of America north of Mexico]. —Botosaneanu 1992: 109 [key to species in the Levant]. —Moulton and Stewart 1996: 107 [key to species of the Interior Highlands of North America]. —Moulton et al. 1999: 241 [key to North American species]. —Kachalova in Medvedev 1998: 188 [key to the species of the European part of the USSR]. —Rueda Martín 2006: 252 [distribution].

The genus *Ithytrichia* consists of seven species occurring in a primarily Holarctic distribution, but with a single species recorded from northcentral Mexico and another from northwestern Argentina. Similarities shared between the larvae, including features of the mandibles, thoracic sternites, and the fore-coxae, led Nielsen (1948) to conclude

that the genera *Ithytrichia* and *Orthotrichia* were closely related. Detailed larval descriptions have been given for *I. lamellaris* (Nielsen 1948) and *I. ferni* (Rueda Martín 2006), and the North American species were reviewed by Wiggins (1996).

aquila González & Malicky, 1988: 66 [type locality: Espagne, Prov. Cádiz, Puente de la Terrona, Rio Guadalete, 360 m; depository not designated; ♂]. —González et al. 1990: 212 [checklist]. —Malicky 2004a: 65 [atlas]. —Malicky 2005b: 545 [checklist]. —González and Menéndez 2011: 119 [distribution].

Distribution. —Spain.

bosniaca Murgoci, Botnariuc, & Botosaneanu, 1948: 219 [type locality: [Bosnia]; depository not designated; larva]. —Malicky 1979: 9 [♂; distribution]. —Malicky 1983b: 53 [atlas; ♂]. —Cianficconi et al. 1999: 278 [distribution]. —Cianficconi et al. 2002: 146 [distribution]. —Sipahiler 2003b: 33 [distribution]. —Malicky 2004a: 65 [atlas]. —Malicky 2005b: 545 [checklist]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 65 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Malicky 2014b: 6 [teratological structures]. —Karaouzas and Malicky 2015: 14 [distribution]. —Oláh 2017: 136 [distribution].

Distribution. —Bosnia, Greece, Italy, Turkey.

clavata Morton, 1905: 67 [type locality: [United States], Ithaca, New York; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Tjeder 1930a: 135 [♂; distribution]. —Betten 1934: 156 [♂; distribution]. —Kimmins 1943: 155; 156 [distribution; ♂]. —Ross 1944: 124 [♂; ♀; distribution]. —Denning 1947b: 171 [distribution]. —Ross and Spencer 1952: 46 [distribution]. —Morse and Blickle 1953: 72 [checklist]. —Nybom 1960: 18 [distribution]. —Etnier 1965: 147 [checklist]. —Botosaneanu 1967: 293 [distribution]. —Cloud and Stewart 1974: 806 [biology; distribution]. —Roy and Harper 1975: 1082 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Roy and Harper 1979: 152 [checklist]. —Blickle 1979: 50, 57 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —O'Connor 1982: 548 [distribution]. —Unzicker et al. 1982: 9 [checklist]. —Huryn and Foote 1983: 791 [distribution]. —Malicky 1983b: 53 [atlas; ♂]. —Hamilton et al. 1983: 18 [distribution]. —González and Otero 1983: 118 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Malicky and Lounaci 1987: 14, 15, 17 [checklist]. —Spuris 1989: 16 [distribution]. —González et al. 1990: 212 [checklist]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Moulton et al. 1994: 170 [distribution]. —Moulton and Stewart 1996: 107 [♂; larva; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton and Stewart 1998: 106 [biology; distribution]. —Moulton et al. 1999: 234 [♂; ♀; distribution]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 504 [distribution]. —Valle 2001: 65 [distribution]. —Gullefors 2002: 138 [distribution]. —Andersen and Kjærandsen 2002: 93 [distribution]. —Mirmoayedi and Malicky 2002: 164 [distribution]. —Malicky 2004a: 65

[atlas]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Malicky 2005b: 545 [checklist]. —Berlin 2005: 129 [distribution]. —Lubini-Ferlin and Vicentini 2005: 67 [checklist]. —Bowles et al. 2007: 21 [distribution; biology]. —Robert 2007: 83 [checklist]. —Berlin and Thiele 2007: 49 [checklist]. —Gullefors 2008: 64 [checklist]. —Blinn and Ruiter 2009b: 186 [distribution]. —Etnier 2010: 485 [distribution]. —Hinchliffe 2010: 467 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Armitage et al. 2011: 14 [checklist]. —Myers et al. 2011: 107 [distribution]. —González and Menéndez 2011: 119 [distribution]. —Ivanov 2011: 195 [checklist]. —Harris et al. 2012: 8 [checklist]. —O'Connor and O'Connor 2013: 189 [distribution]. —O'Connor 2013: 64 [distribution]. —Martín et al. 2015: 74 [distribution]. —O'Connor 2015: 28 93 [distribution]. —Gullefors 2016: 155 [checklist]. —Ruiz-García et al. 2016: 4 [distribution]. —Wallace 2016: 21, 23, 55 [conservation status]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 118 [checklist]. —Mabrouki et al. 2020: 13 [distribution].

—*dovporiana* Botosaneanu, 1980: 74 [type locality: Israel, Arugot, dans le dépression de la Mer Morte; ZMUA; ♂; pupa]. —Botosaneanu 1982b: 11 [habitat threat]. —Botosaneanu 1992: 111 [♂; ♀]. —Ruiz-García 1995: 203 [distribution]. —Malicky 2005b: 545 [to synonymy].

Distribution. —Canada, England, Finland, Germany, Iran, Ireland, Israel, Italy, Morocco, Portugal, Russia, Spain, Sweden, U.S.A.

ferni Rueda Martín, 2006: 252 [type locality: Argentina, Tucumán Prov., Taí Viejo, Río Taí, 26°43'25"S 64°17'26"W, 827 m; IFML; ♂; larva; pupa; case; biology]. —Isa Miranda and Rueda Martín 2014: 199 [distribution].

Distribution. —Argentina.

lamellaris Eaton, 1873: 140 [type locality: [England], the Sandy Brook, near Hanging Bridge, Ashbourne, Derbyshire; NHMUK; ♂]. —Klapálek 1897: 6 [larva]. —McLachlan 1880: 515 [revision; ♂; ♀]. —Morton 1888: 171 [larva; case]. —Ris 1897: 431 [distribution]. —Morton 1899b: 281 [distribution]. —Richters 1902: 19 [larva]. —Morton 1904: 325 [distribution]. —Lundblad 1918: 342 [distribution; ecology]. —Martynov 1924: 47 [♂; ♀]. —Tjeder 1930a: 136 [♂; distribution]. —Martynov 1934: 145 [♂; ♀]. —Mosely 1939b: 275 [♂]. —Kimmins 1943: 155 [distribution]. —Nielsen 1948: 114 [larva]. —Kimmins 1957a: 108 [lectotype designation]. —Nybom 1960: 18 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Solem 1970b: 93 [distribution]. —Botosaneanu and Gasith 1971: 98 [distribution]. —Fahy 1972: 202 [distribution]. —Spuris 1972: 28, 30 [checklist]. —Szczyński 1975: 41 [distribution]. —Botosaneanu and Malicky 1978: 340 [distribution]. —Kumanski 1979: 6 [♂; distribution]. —Malicky 1983b: 53 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 152 [♂]. —Andersen and Tysse 1985: 84 [distribution]. —Wiberg-Larsen 1985: 40 [checklist]. —Moubayed and Botosaneanu 1985: 63 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Sipahiler and Malicky 1987: 129 [distribution].

—Spuris 1989: 16 [distribution]. —Waringer 1989: 390 [distribution; ecology].
—Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Andersen et al.
1990: 52 [distribution]. —González et al. 1990: 212 [checklist]. —Botosaneanu
1992: 109 [♂; ♀]. —Andersen et al. 1993b: 3 [distribution]. —Andersen et al.
1993a: 51 [distribution]. —Maier et al. 1995: 148 [distribution]. —Bagge 1995:
94 [distribution; biology]. —Nógrádi and Uherkovich 1994: 31 [distribution].
—Uherkovich and Nógrádi 1997: 461 [distribution]. —Peissner and Kappus
1998: 162 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution].
—Malicky 1999c: 96 [distribution]. —Cianficconi et al. 1999: 57 [distribution].
—Uherkovich and Nógrádi 2001: 94 [distribution]. —Nógrádi and Uherkovich
2001: 297 [checklist]. —Valle 2001: 64 [distribution]. —Gullefors 2002: 138
[distribution]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Ujvárosi
2002: 384 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Gullefors 2003: 195
[distribution]. —Arefina 2004: 211 [distribution]. —Malicky 2004a: 65 [atlas].
—Malicky 2005b: 545 [checklist]. —Sipahiler 2005: 397 [distribution]. —Berlin
2005: 127, 129 [distribution]. —Gullefors 2005b: 138 [distribution]. —Hohmann
2005: 106 [checklist]. —Coppa and Tachet 2005: 132 [distribution]. —Malicky
2005a: 66 [distribution]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin
and Vicentini 2005: 68 [checklist]. —Beketov 2006: 14 [distribution]. —Voigt
et al. 2006: 73 [distribution]. —Chvojka and Komzák 2006: 358 [distribution].
—Robert 2007: 83 [checklist]. —Berlin and Thiele 2007: 49 [checklist]. —Dohet
et al. 2008: 46 [distribution; ecology]. —Schrinkel et al. 2008: 90 [distribution].
—Chvojka and Komzák 2008: 13 [distribution]. —Szczęsny and Godunko 2008:
15 [checklist]. —Flint and Thomas 2008: 40 [distribution]. —Ujvárosi et al. 2008:
112 [distribution]. —Višinskienė 2009: 27 [checklist]. —Hohmann 2010: 40
[distribution]. —Waringer and Graf 2011: 281 [larval synopsis]. —Ivanov 2011:
195 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Skuja
2011: 425 [distribution; ecology]. —Crofts 2011: 72 [distribution]. —Timm et al.
2011: 408 [distribution]. —Viidalepp et al. 2011: 196 [distribution]. —Komzák
and Chvojka 2012: 720 [distribution]. —Andersen and Hagenlund 2012: 136
[distribution]. —O'Connor 2013: 64 [distribution]. —Tempelman et al. 2013:
288 [distribution]. —Drescher 2013: 53 [distribution; biology]. —Corallini et al.
2013: 26 [distribution]. —Tempelman and Sanabria 2013b: 144 [distribution].
—O'Connor and O'Connor 2014: 273 [distribution]. —Martín et al. 2014:
72 [distribution]. —Hohmann et al. 2014: 85 [distribution]. —Martínez et al.
2015: 40 [distribution]. —Stojanović et al. 2015: 52 [larva; case; distribution;
ecology]. —O'Connor 2015: 28, 94 [distribution]. —Dia 2015: 51 [distribution].
—Martínez et al. 2016: 52 [distribution]. —O'Connor and O'Connor 2016: 166
[distribution]. —Pan'kov and Krashennnikov 2016: 333 [distribution]. —Küttner
et al. 2016: 179 [distribution]. —D. Smirnova et al. 2016: 401 [distribution].
—van Haaren et al. 2016: 10 [distribution]. —Potikha and Vshivkova 2016: 364
[distribution]. —Gullefors 2016: 155 [checklist]. —O'Connor and O'Connor
2017b: 53 [distribution]. —O'Connor and O'Connor 2018: 82 [distribution].

- Gullefors 2018: 108 [biology; distribution]. —Cerjanec et al. 2020: 13 [distribution]. —Edmonds-Brown 2020: 91 [checklist]. —Kroča and Komzák 2020: 147 [distribution]. —O'Connor 2020: 140 [distribution].
- brunneicornis* Pictet, 1834: 226 [type locality: [Switzerland]; no holotype designated; in *Hydroptila*]. —Fischer 1961: 104 [considered a junior synonym to either *Ithytrichia lamellaris* or *Orthotrichia angustella*].
- Distribution.** —Austria, Belarus, Bulgaria, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Kazakhstan, Latvia, Lebanon, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Russia, Scotland, Serbia, Spain, Sweden, Switzerland, Turkey, Ukraine.
- mazon* Ross, 1944: 124 [type locality: [United States], Illinois, Mazon, along Mazon Creek; INHS; ♂]. —Blickle 1979: 50, 57 [checklist; ♂]. —Moulton and Stewart 1996: 107 [♂; distribution]. —Moulton et al. 1999: 236 [♂; ♀; distribution]. —Armitage et al. 2011: 14 [checklist].
- Distribution.** —U.S.A.
- mexicana* Harris & Contreras-Ramos, 1989: 176 [type locality: Mexico, Tamaulipas, Rio Frio, 6 km S Gomez Farias; NMNH; ♂]. —Moulton et al. 1999: 236 [♂; ♀; distribution]. —Houghton 2001: 90 [distribution]. —Blinn and Ruiter 2005: 69 [distribution; biology]. —Blinn and Ruiter 2006: 332 [biology; distribution]. —Blinn and Ruiter 2009a: 303 [biology]. —Blinn and Ruiter 2009b: 186 [phenology; distribution]. —Vieira et al. 2009: 257 [distribution]. —Razo-González 2018: 32 [distribution]. —Mendez et al. 2019: 128 [checklist].
- Distribution.** —Mexico, U.S.A.

Genus *Orthotrichia* Eaton, 1873

- Orthotrichia* Eaton, 1873: 141 [type species: *Hydroptila angustella* McLachlan, 1865, original designation]. —McLachlan 1880: 518 [revision]. —Mosely 1939: 276 [key to the British species]. —Ross 1944: 139 [revision of North American species; key to Nearctic species]. —Kingsolver and Ross 1961: 28 [revision of North American species]. —Disney 1972: 84 [larvae observed preying on Simuliidae]. —Marshall 1979b: 213 [generic review]. —Blickle 1979: 7 [key to species of America north of Mexico]. —Wells 1979a: 587 [key to males of Australian species]. —Wells 1984: 271 [key to males from New Guinea and New Britain]. —Wells 1985b: 26 [larva; pupa; case]. —Wells 1990b: 395 [key to North Sulawesi species]. —Wells 1991: 491 [key to males of New Guinea]. —Botosaneanu 1992: 99 [key to species in the Levant], —Moulton and Stewart 1996: 122 [key to species of the Interior Highlands of North America]. —Kachalova in Medvedev 1998: 182 [key to the species of the European part of the USSR].
- Clymene* Chambers, 1873: 114 [type species: *Clymene aegerfasciella* Chambers, 1873, monotypic]. —Flint 1966: 135 [to synonymy].
- Javanotrichia* Ulmer, 1951: 75 [type species: *Javanotrichia maeandrica* Ulmer, 1951, original designation]. —Marshall 1979b: 213 [to synonymy].

Orthotrichiella Ulmer, 1951: 79 [type species: *Orthotrichiella ranauana* Ulmer, 1951, original designation]. —Marshall 1979b: 213 [to synonymy].

Baliotrichia Ulmer, 1951: 88 [type species: *Baliotrichia litoralis* Ulmer, 1951, original designation]. —Marshall 1979b: 213 [to synonymy].

Targatrichia Neboiss, 1977: 41 [type species: *Targatrichia zonata* Neboiss, 1977, original designation]. —Wells 1979a: 591 [transferred sole species to *Orthotrichia*].

The large, cosmopolitan genus *Orthotrichia* consists of 272 species, including a single fossil species, and is particularly species-rich in Southeast Asia, Australia, and Africa. Marshall (1979b) commented on the characteristic asymmetrical genitalia of the males and divided the genus into four species groups (*angustella*, *litoralis*, *costalis*, and *aegerfasciella*), with the possibility of a fifth (*kokodana*). Wells (1992, 2005) observed one species group of *Orthotrichia* occurring within the pupal cases of various hydropsychid and philopotamid species and concluded that the *Orthotrichia* larvae are preying upon the “host” pupae; the species involved appear to have an early fifth instar larval stage and case distinct from the final stage. Larval descriptions are given for *O. costalis* (Nielsen 1948), *O. angustella* (Jacquemart 1962a), and several others (Ulmer 1957; Wells 1985b, 1992, 2005; Wiggins 1996).

aberrans Wells, 1979a: 621 [type locality: [Australia] Victoria, Mitta Mitta River, 8 km NE. Benambra; NMV; ♂]. —Wells 1985b: 31 [larva, pupa, case]. —Neboiss 1986: 95 [atlas; ♂].

Distribution. —Australia.

acina Wells, 2005: 390 [type locality: Australia, N Queensland, 18°57'S 146°10'E, Mt Spec State Forest, Williams Creek above mine, 650 m; NMV; ♂].

Distribution. —Australia.

aculeata Wells, 1979a: 603 [type locality: [Australia] Western Australia, Spillway Creek, Ord River Dam; WAM; ♂]. —Neboiss 1986: 87 [atlas; ♂].

Distribution. —Australia.

adornata Wells, 1979a: 590 [type locality: [Australia] Victoria, Millgrove, Yarra River; NMV; ♂; ♀]. —Neboiss 1986: 85 [atlas; ♂; ♀]. —Neboiss 2002: 55 [distribution, checklist].

Distribution. —Australia.

advena Wells, 1984: 276 [type locality: [Papua] New Guinea, NE., Morobe District, Mt Missim, 1300 m; BPBM; ♂]. —Neboiss 1986: 89 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

aegerfasciella (Chambers, 1873): 114 [type locality: United States, Kentucky; sex unknown; in *Chymene*]. —Bueno-Soria and Flint 1978: 201 [distribution]. —Resh et al. 1978: 383 [distribution]. —Botosaneanu 1979: 49 [distribution]. —Etnier and Schuster 1979: 18 [checklist]. —Blickle 1979: 53, 59 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Harris et al. 1982a: 511 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Waltz and McCafferty 1983a: 11

- [distribution]. —Hamilton et al. 1983: 18 [distribution]. —Harris et al. 1984: 109 [distribution]. —Lake 1984: 220 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Bowles and Mathis 1989: 239 [distribution]. —Morse et al.: 23 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Botosaneanu 1991: 132 [distribution]. —Harris et al. 1991: 237 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Masteller 1993: 134 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Floyd et al. 1993: 91 [phenology; distribution]. —Flint 1996a: 16 [checklist]. —Moulton and Stewart 1996: 122 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Maes 1999: 1194 [checklist]. —Ruiter 1999: 166 [distribution]. —Flint and Pérez-Gelabert 1999: 41 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Botosaneanu 2002b: 87 [checklist]. —Pescador et al. 2004: 133 [checklist]. —Flint and Sykora 2004: 40 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Zeullig et al. 2006: 43 [distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Chamorro-Lacayo et al. 2007: 43 [distribution]. —Pérez-Gelabert 2008: 301 [checklist]. —Flint 2011: 104 [checklist]. —Houghton et al. 2011b: 6 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Myers et al. 2011: 108 [distribution]. —Harris et al. 2012: 9 [checklist]. —Wright et al. 2013: 466 [biology; distribution]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —DeWalt et al. 2016: 52 [distribution]. —Denson et al. 2016: 5 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Harris and Rasmussen 2019: 217 [♂; ♀; distribution]. —Bowles et al. 2020: 8 [distribution]. —Houghton and Lardner 2020: 42 [distribution].
- americana* Banks, 1904b: 116 [type locality: United States, Washington, D.C.; MCZ; ♂]. —Banks 1904a: 216 [distribution]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 151 [♂]. —Ross 1938b: 9 [lectotype designated]. —Ross 1944: 140 [♂; ♀; distribution]. —Denning 1947a: 18 [distribution]. —Denning 1947b: 172 [distribution]. —Morse and Blickle 1953: 72 [checklist]. —Kingsolver and Ross 1961: 29 [♂; distribution]. —Etnier 1965: 147 [checklist]. —Flint 1966: 135 [to synonymy]. —Unzicker et al. 1970: 172 [distribution; as *Ochrotrichia americana*]. —Edwards 1973: 506 [distribution]. —Swegman et al. 1981: 139 [distribution].
- dorsalis* (Banks, 1904a): 216 [type locality: United States, Washington, D.C.; Collection Banks; ♀; in *Oxyethira*]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 161 [checklist]. —Ross 1938b: 10 [lectotype designated]. —Ross 1944: 140 [as synonym of *americana*]. —Kelley 1984a: 442 [*dorsalis* to *Oxyethira*].
- brachiata* Morton, 1905: 70 [type locality: [United States], New York, Ithaca; depository not designated; ♂]. —Banks 1907a: 50 [catalogue]. —Betten 1934: 152 [checklist]. —Ross 1938: 9 [as synonym of *americana*].
- Distribution.** —Canada, Cuba, Dominican Republic, Haiti, Mexico, Nicaragua, U.S.A.

aequatoriana Kimmins, 1957c: 15 [type locality: Uganda, Jinja; NHMUK; ♂].
—Johanson 1992: 118 [checklist]. —Wells and Andersen 1995: 145 [checklist].
—Guenda 1996: 245 [distribution].

Distribution. —Burkina Faso, Uganda.

agtuuganonica Mey, 1998a: 552 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

aiema Wells, 1991: 514 [type locality: Papua New Guinea, Central Province, Aime River, 9°25'S 147°35'E; ANIC; ♂].

Distribution. —Papua New Guinea.

airterjun Malicky, Melnitsky, & Ivanov, 2014a: 833 [type locality: [Indonesia] Papua, Insel Biak, Warsa, Wafarak Wasserfall, 0°47'39"S 135°55'31"E, 50 m; ZIN; ♂].

Distribution. —Indonesia.

alata Wells, 1990c: 123 [type locality: [Australia] Northern Territory, Kambolgie Creek, 13°32'S 132°23'E; NTM; ♂; case]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

albuguttata Jacquemart, 1956: 4 [type locality: [Congo], Bukavu (au large); IRSNB; ♂; ♀]. —Jacquemart 1957: 124 [♂; distribution]. —Guenda 1996: 245 [distribution].

Distribution. —Burkina Faso, Congo.

alveata Wells, 1979a: 610 [type locality: [Australia] Queensland, Mossman Gorge; ANIC; ♂]. —Neboiss 1986: 91 [atlas; ♂].

Distribution. —Australia.

amgulil Oláh & Johanson, 2010a: 39 [type locality: India, Karnataka, Tunga River at Shimoga; Collection Oláh; ♂].

Distribution. —India.

ammanensis Malicky, 1996b: 203 [type locality: Jordan, Amman; LNKD; ♂]. —Malicky 2004a: 69 [atlas]. —Malicky 2005b: 545 [checklist]. —Sipahiler 2005: 397 [distribution].

Distribution. —Jordan, Turkey.

amnica Wells, 1990c: 119 [type locality: [Australia] Northern Territory, Kambolgie Creek, 13°32'S 132°23'E; NTM; ♂]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

andicairnsae Wells, 2010a: 51 [type locality: [Australia] North Queensland, Fishery Falls, S of Cairns, 17°11'S 145°52'E; ANIC; ♂].

Distribution. —Australia.

angustella (McLachlan, 1865): 95 [type locality: [England]; NHMUK; ♂; in *Hydroptila*]. —Eaton, 1873: 142 [♂; distribution; in *Orthotrichia*]. —McLachlan 1880: 519 [revision; ♂; ♀; in *Orthotrichia*]. —McLachlan 1884: 72 [distribution]. —Morton 1887: 202 [case]. —Morton 1888: 173 [case]. —Morton 1896: 104 [distribution]. —Morton 1904: 326 [distribution]. —Martynov 1924: 50 [♂]. —Ulmer 1929: 255 [morphological notes; comparison with *O. tetensi*].

- Martynov 1934: 123 [♂]. —Mosely 1939b: 277 [♂]. —Kimmins 1943: 155 [distribution]. —Schmid 1952: 652 [distribution]. —Kimmins 1957a: 107 [lectotype designation]. —Jacquemart and Coineau 1962: 49 [♂]. —Jacquemart 1962a: 1 [larva]. —Moretti et al. 1966: 88 [distribution; note on attraction to light]. —Botosaneanu 1967: 293 [distribution]. —Solem 1970b: 93 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —González and Otero 1983: 117 [distribution]. —Malicky 1983b: 54, 55 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 147 [♂]. —Wiberg-Larsen 1985: 40 [checklist]. —González et al. 1986: 113 [distribution]. —Nógrádi 1986: 135 [distribution; ♂]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Malicky and Lounaci 1987: 15, 17 [checklist]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Spuris 1989: 17 [checklist]. —González et al. 1990: 212 [checklist]. —Botosaneanu 1993b: 160 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Cianficconi et al. 1999: 277 [distribution]. —Nógrádi and Uherkovich 1998: 338 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Urbanič et al. 2000: 45 [distribution]. —Uherkovich and Nógrádi 2001: 94 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Nógrádi 2001: 85 [distribution]. —Gullefors 2002: 132, 138 [redlisted in Sweden; checklist]. —Cianficconi et al. 2002: 146 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Cibaitė 2003b: 8 [distribution]. —Gullefors 2003: 194 [distribution]. —Bonada et al. 2004: 53 [distribution]. —Malicky 2004a: 68, 69 [atlas]. —Malicky 2005b: 545 [checklist]. —Bonada et al. 2005: 787 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Robert 2007: 83 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Szczęsny and Godunko 2008: 15 [checklist]. —Gullefors 2008: 64 [checklist]. —Višinskienė 2009: 28 [checklist]. —Cianficconi and Corallini 2010: 87 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —González and Menéndez 2011: 119 [distribution]. —O'Connor 2013: 64 [distribution]. Zuyderduyn and Tempelman 2013: 29 [distribution]. —O'Connor 2015: 28, 96 [distribution]. —Martín et al. 2015: 74 [distribution]. —Ruiz-García et al. 2016: 4 [distribution]. —Gullefors 2016: 155 [checklist]. —Wallace 2016: 20, 21, 23, 65 [conservation status]. —Graf et al. 2017: 48 [distribution]. —O'Connor and O'Connor 2017b: 53 [distribution]. —O'Connor and O'Connor 2018: 83 [distribution]. —Komzák and Kroča 2018: 168 [distribution]. —Cerjanec et al. 2020: 13 [distribution]. —Mabrouki et al. 2020: 14 [distribution]. —Smirnova et al. 2020: 68 [distribution].
- brunneicornis* (Pictet, 1834): 226 [type locality: [Switzerland]; no holotype designated; in *Hydroptila*]. —Fischer 1961: 135 [considered a junior synonym to either *O. angustella* or *Ithytrichia lamellaris*].

Distribution. —Algeria, Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, England, France, Germany, Hungary, Ireland, Italy, Kazakhstan, Lithuania, Morocco, Netherlands, Norway, Portugal, Romania, Russia, Slovenia, Spain, Sweden, Switzerland, Ukraine.

annulata Wells, 1984: 274 [type locality: [Papua] New Guinea, Mendi, 1497 m; ANIC; ♂]. —Neboiss 1986: 90 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

apophysis Zhou & Yang in Zhou et al. 2010: 30 [type locality: [China], Jiangxi Province, Jiu Lian Shan National Nature Reserve, Da-Qiu-Tian, 8.2 km northwest of Da-Qiu-Tian, 114°25'50"E, 24°34'15"N, 425 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

arala Oláh & Johanson, 2010a: 40 [type locality: Madagascar, Perinet; MNHN; ♂].

Distribution. —Madagascar.

armata Wells, 1979a: 594 [type locality: [Australia] Victoria, Snobs Creek; NMV; ♂]. —Wells 1985b: 29 [case, biology]. —Neboiss 1986: 86 [atlas; ♂; ♀]. —Bovill et al. 2016 [larval predation on Trichoptera eggs].

Distribution. —Australia.

asimetris Wells & Malicky, 1997: 189 [type locality: [Indonesia] N Sumatra, 8 km N Sindar Raya; Collection Malicky; ♂]. —Malicky and Chantaramongkol 2007: 1037 [♂; *distribution*]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 46 [atlas; ♂]. —Malicky et al. 2014c: 33 [distribution].

Distribution. —Cambodia, Indonesia, Malaysia, Thailand.

atrasetta Wells, 1979a: 594 [type locality: [Australia] Victoria, Millgrove, Yarra River; NMV; ♂; ♀]. —Wells 1985b: 28 [larva; case]. —Neboiss 1986: 85 [atlas; ♂; ♀].

Distribution. —Australia.

attenuata Wells, 1983: 643 [type locality: Australia, New South Wales, Darling R., Bur-rundy Station, 120 km N. Mildura; NMV; ♂; ♀]. —Neboiss 1986: 93 [atlas; ♂; ♀].

Distribution. —Australia.

avicularis Kimmins, 1951: 203 [type locality: India, Behar, Pusa; NHMUK; ♂]. —Oláh and Johanson 2010a: 42 [distribution].

Distribution. —India.

baldufi Kingsolver & Ross, 1961: 32 [type locality: [United States], Minnesota, Eaglenest Lake, St. Louis Co.; INHS; ♂; ♀]. —Etnier 1965: 147 [checklist]. —Blickle 1979: 53, 59 [checklist; ♂]. —Roy and Harper 1979: 152 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1991: 238 [distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution; as *balduffi*]. —Pescador et al. 2004: 133 [checklist]. —Houghton et al. 2011b: 6 [distribution]. —Myers et al. 2011: 108 [distribution]. —Harris et al. 2012: 9 [checklist]. —Wright et al. 2013: 466 [biology; distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist; as *balduffi*]. —Harris and Rasmussen 2019: 218 [♂; ♀; distribution].

Distribution. —Canada, U.S.A.

balra Oláh, 2012: 49 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Warmon Creek, 1. waterfall; Collection Oláh; ♂]. —Oláh and Kovács 2018: 181 [distribution].

Distribution. —Indonesia.

- banisbus* Wells, 1991: 512 [type locality: Papua New Guinea, Morobe Province, Bulolo, creek behind forestry compound, 7°13'S 146°35'E; ANIC; ♂; larva, case].
Distribution. —Papua New Guinea.
- barnardi* Scott, 1963: 470 [type locality: [South Africa], Great Berg River, Stn. 1; SAMC; ♂; ♀; larva; pupal case]. —Wells and Andersen 1995: 163 [distribution]. —Palmer 1996: 43 [distribution]. —de Moor 2007: 216 [distribution]. —de Moor 2011: 354 [distribution]. —Mey 2011: 345 [checklist].
Distribution. —South Africa, Tanzania.
- becca* Wells & Dostine, 2016: 597 [type locality: [Australia] Northern Territory, Berry Springs; NTM; ♂].
Distribution. —Australia.
- bellicosa* Wells, 1979a: 618 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek; WAM; ♂]. —Neboiss 1986: 94 [atlas; ♂]. —Wells et al. 2019: 33 [detection frequency].
Distribution. —Australia.
- bencana* Oláh, 1989: 291 [type locality: Vietnam, Bac Thai Province, PQuang Chu; HNHM; ♂]. —Armitage et al. 2005: 27 [checklist]. —Zhou et al. 2010: 40 [checklist]. —Malicky 2010a: 52 [atlas; ♂]. —Yang et al. 2016: 476 [checklist].
—adunca Yang & Xue, 1992: 29 [type locality: [China] Guilin, Guangxi; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1041 [♂; distribution, to synonymy].
Distribution. —China, Thailand, Vietnam.
- benguelensis* Marlier, 1965: 69 [type locality: [Angola] District de Benguela, Catumbela, Marco de Canavezes (Cubal da Ganda), Loc. 10656-10; MDLA; ♂]. —Wells and de Moor 2020: 512 [checklist].
Distribution. —Angola.
- bensoni* Wells, 1990c: 125 [type locality: [Australia] NE Queensland, Yuccabine Creek; NMV; ♂].
Distribution. —Australia.
- berbaring* Wells & Malicky, 1997: 188 [type locality: [Indonesia] N Sumatra, Dolok Merangir (Spring), 03°07'N 99°11'E; Collection Malicky; ♂]. —Wells and Huisman 2001: 2012 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 52 [atlas; ♂].
Distribution. —Indonesia.
- bertie* Wells, 2005: 390 [type locality: Australia, N Queensland, 11°45'S 142°35'E, Bertie Creek, 1 km SE Heathlands HS; NMV; ♂].
Distribution. —Australia.
- bilasnating* Wells, 1991: 416 [type locality: Papua New Guinea, Central Province, Iomari Creek on Bereina-Port Moresby road, 9°04'S 147°06'E; ANIC; ♂].
Distribution. —Papua New Guinea.
- biokrotta* Melnitsky & Malicky, 2008: 25 [type locality: Thailand, Trat Province, Chang island, river Khlong Plu, over the Khlong Plu Waterfall, 12°03'56.74"N 102°18'51.30"E; ZIN; ♂]. —Malicky 2010a: 49 [atlas; ♂].
Distribution. —Thailand.

bipela Wells, 1991: 514 [type locality: Papua New Guinea, West Highlands Province, Peregai, 6°09'S 144°11'E; ANIC; ♂].

Distribution. —Papua New Guinea.

bisetula Wells & Andersen, 1995: 163 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 10, 1420 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

bishopi Wells, 1979a: 596 [type locality: [Australia] South Australia, Second Valley, Anacotilla Creek; ANIC; ♂; ♀]. —Wells 1985b: 28 [larva, case]. —Neboiss 1986: 86 [atlas; ♂; ♀].

Distribution. —Australia.

bolyi Guenda, 1996: 247 [type locality: [Burkina Faso], à Fon dans la zone des sources du Mouhoun; UOBF; ♂].

Distribution. —Burkina Faso.

bucera Yang & Xue, 1992: 29 [type locality: [China], Longsheng, Jinjiang, Guangxi; NAUJ; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Zhou et al. 2010: 40 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

bullata Wells, 1979a: 602 [type locality: [Australia], Queensland, Mossman Gorge; ANIC; ♂]. —Neboiss 1986: 88 [atlas; ♂].

Distribution. —Australia.

bunkosa Oláh, 2012: 50 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Site B, small stream, 250 m from mouth, 0°48'47.08"S 130°38'18.91"E; Collection Oláh; ♂].

Distribution. —Indonesia.

butmasensis Johanson, Wells, Malm, & Espeland, 2011: 288 [type locality: [Vanuatu], Espiritu Santo, Central Santo, stream crossing track, 3 km N Butmas, 410 m, loc#11, 15°20.856'S 166°58.347'E; NHRS; ♂].

Distribution. —Australia.

capillata Wells, 1979a: 620 [type locality: [Australia] Queensland, Mossman Gorge; ANIC; ♂]. —Wells 1985b: 31 [larva]. —Neboiss 1986: 94 [atlas; ♂]. —Oláh and Johanson 2010a: 43 [distribution].

Distribution. —Australia.

cazaubonae Guenda, 1996: 247 [type locality: [Burkina Faso], à Badala, village de la localité de Dédougou, sur le cours moyen du Mouhoun; UOBF; ♂].

Distribution. —Burkina Faso.

cernyi Mey, 1990: 3 [type locality: [Philippines], Nord-Luzon, Ifugao, Banaue vic., N Lagawe; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

chitwan Malicky & Chantaramongkol, 2007: 1041 [type locality: Nepal, Chitwan NP, Temple Tiger Lodge, 27°32'N 84°04'E, 150 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 44 [distribution]. —Mattern 2015: 501 [distribution].

Distribution. —India, Nepal.

cinctigera Wells, 1984: 277 [type locality: [Papua] New Guinea, Mendi, 1497 m; ANIC; ♂]. —Neboiss 1986: 90 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

conferta Wells, 1983: 634 [type locality: Australia, Victoria, Wellington R., 17 km N. of Licola; NMV; ♂; ♀]. —Wells 1985b: 32 [larva, case, pupa, biology]. —Neboiss 1986: 95 [atlas; ♂; ♀]. —Wells 2010a: 52 [♂]. —Oláh and Johanson 2010a: 44 [distribution].

Distribution. —Australia.

constricta Wells, 1990c: 127 [type locality: [Australia] Northern Territory, Kakadu National Park, Radon Springs, 12°45'S 132°55'E; NMV; ♂]. —Oláh and Johanson 2010a: 44 [distribution].

Distribution. —Australia.

coreana Ito & Park, 2016: 230 [type locality: Korea, Gyeongsangbuk-do, Cheongdo-gun, Unmun-myeon, Sinwon-ri, 35°40'42.6"N, 128°57'29.0"E; NIBR; ♂; ♀]. —Park and Kong 2020: 297 [checklist].

Distribution. —Korea.

cornuta Zhou & Yang in Zhou et al. 2010: 31 [type locality: [China], Sichuan Province, Shi-mian County, Li-zi-ping Nature Preserve, Ca-luo-xiang Town, unnamed trib. of Hai-zi-gou stream, 200 m W of 3rd-level Hydropower Station, 4.3 km S of G108 from 2600.8 km stone marker, 102°22'08"E, 29°08'27"N, 1384 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

costalis (Curtis, 1834): 218 [type locality: "Britain"; type not designated; in *Hydroptila*]. —Stephens 1836: 153 [distribution]. —McLachlan 1865: 96 [♂]. —Martynov 1924: 53 [♂; in *Oxyethira*]. —Kimmins 1958b: 14 [♀; distribution]. —Neboiss 1963: 594 [lectoholotype designated; to *Orthotrichia*]. —Botosaneanu 1967: 293 [distribution]. —Spuris 1972: 19 [checklist]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Kumanski 1979: 5 [♂; distribution]. —Moretti et al. 1981: 350, 354 [biology; distribution]. —Moretti and Cianficconi 1981: 200 [checklist]. —Andrikovics and Ujhelyi 1983: 6 [distribution]. —Malicky 1983b: 54, 55 [atlas; ♂; ♀]. —Kumanski 1985: 151, 153 [♂]. —Wiberg-Larsen 1985: 40 [checklist]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Malicky and Lounaci 1987: 15 [checklist]. —Sipahiler and Malicky 1987: 129 [distribution]. —Spuris 1989: 17 [checklist]. —Waringer 1989: 390 [distribution; ecology]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Andersen et al. 1990: 52 [distribution]. —Xue et al. 1992: 353–356 [distribution]. —Botosaneanu 1992: 105 [♂; ♀]. —Andersen et al. 1993b: 3 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Haase 1994: 206 [distribution]. —Dallai and Afzelius 1995: 166 [sperm structure]. —Kahnert 1995: 124 [distribution]. —Chvojka 1996: 131 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Brettfeld 1997: 137 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Nógrádi and Uherkovich 1998: 338 [distribution].

- Uherkovich and Nógrádi 1999: 420 [distribution]. —Cianficconi et al. 1999: 57 [distribution]. —Malicky 1999c: 96 [distribution]. —Wiberg-Larsen and Karsholt 1999: 126 [distribution]. —Morse et al. 2001: 102 [distribution]. —Uherkovich and Nógrádi 2001: 94 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Nógrádi and Uherkovich 2002: 129 [distribution]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Arefina et al. 2002: 100 [♂; ♀; distribution]. —Gullefors 2002: 138 [checklist]. —Gullefors 2003: 194, 195 [distribution]. —Sipahiler 2003b: 33 [distribution]. —Cibaitė 2003a: 10 [checklist]. —Arefina and Armitage 2003: 17 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 68, 69 [atlas]. —Graf and Hutter 2004: 147 [distribution]. —Cianficconi et al. 2004: 256, 258 [distribution; biology]. —Berlin 2005: 128, 130 [distribution]. —Gullefors 2005a: 119 [distribution]. —Sipahiler 2005: 397 [distribution]. —Mey 2005b: 119 [distribution]. —Yang et al. 2005: 458 [checklist]. —Malicky 2005a: 66 [distribution]. —Hohmann 2005: 106 [checklist]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Chvojka and Komzák 2006: 358 [distribution]. —Waringer and Graf 2006: 356 [distribution]. —Mey 2006a: 159 [distribution]. —Schiess-Bühler and Rezbanyai-Reser 2006: 73 [distribution]. —Robert 2007: 83 [checklist]. —Gullefors and Johanson 2007: 64 [distribution]. —Berlin and Thiele 2007: 50 [checklist]. —Cianficconi et al. 2007: 569, 575 [distribution]. —Eskov et al. 2008: 78 [checklist; fossil species in amber]. —Waringer and Graf 2008: 142 [distribution]. —Szczęsny and Godunko 2008: 15 [checklist]. —Gullefors 2008: 64 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Schrinkel et al. 2008: 90 [checklist]. —Višinskienė 2009: 28 [checklist]. —Zhou et al. 2010: 40 [checklist]. —Ivanov 2011: 195 [checklist]. —Cianficconi et al. 2011: 47 [distribution]. —Viidalepp et al. 2011: 196 [distribution]. —Zuyderduyn and Tempelman 2013: 25 [distribution]. —Ito 2013: 40 [♂; ♀; distribution]. —Tempelman and Sanabria 2013a: 20 [distribution]. —Tempelman and Sanabria 2013b: 144 [distribution]. —Mey 2014: 187 [distribution]. —Malicky 2014b: 17 [teratological structures]. —Hohmann et al. 2014: 85 [distribution]. —O'Connor 2015: 28, 97 [distribution]. —Pan'kov and Krasheninnikov 2016: 333 [distribution]. —Yang et al. 2016: 476 [checklist]. —Tanida and Kuranishi 2016: 71 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Sipahiler 2016: 15 [checklist]. —Gullefors 2016: 155 [checklist]. —Graf and Leitner 2016: 37 [distribution]. —Wallace 2016: 16, 19, 24 [conservation status]. —Kobayashi et al. 2017: 17 [distribution]. —Park et al. 2018: 103 [♂; ♀; distribution]. —O'Connor and O'Connor 2018: 83 [distribution]. —Kučinić et al. 2019: 450 [distribution]. —O'Connor 2020: 140 [distribution]. —Park and Kong 2020: 297 [checklist]. —Navara et al. 2020: 46 [distribution].
- tetensii* Kolbe, 1887: 357 [type locality: [Germany], in der unmittelbaren Nähe von Berlin, in der Nähe des Wellenbades an der oberen Spree; no holotype designated]. —Klapálek 1894: 2 [♂; distribution]. —Klapálek 1897: 9 [larva]. —Morton 1899b:

281 [distribution]. —Ris 1903: 17 [distribution; as *tetensi*]. —Morton 1904: 326 [distribution]. —Martynov 1924: 49 [♂]. —Ulmer 1929: 255 [morphological notes; comparison to *O. angustella*]. —Martynov 1934: 122 [♂]. —Mosely 1939b: 279 [♂]. —Nielsen 1948: 95 [larva]. —Berg 1948: table 14 [distribution]. —Schmid 1959b: 693 [distribution]. —Nybom 1960: 18 [checklist]. —Spuris 1962: 62 [distribution]. —Wang 1963: 58 [larva; distribution]. —Neboiss 1963: 594 [to synonymy]. —Spuris 1964: 13 [distribution]. —Spuris 1972: 19 22 23 [checklist]. **Distribution.** —Austria, Belarus, Bulgaria, China, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Japan, Korea, Latvia, Luxembourg, Netherlands, Norway, Romania, Russia, Scotland, Slovakia, Slovenia, South Korea, Sudan, Sweden, Switzerland, Turkey, Ukraine.

cristata Morton, 1905: 75 [type locality: United States, Lake Forest, Illinois; depository not designated; ♂]. —Milne 1936: 77 [as junior synonym of *O. americana*]. —Ross 1944: 141 [♂; ♀; distribution]. —Denning 1947a: 19 [distribution]. —Denning 1947b: 173 [distribution]. —Ross and Spencer 1952: 47 [distribution]. —Morse and Blickle 1953: 72 [checklist]. —Kingsolver and Ross 1961: 32 [♂; distribution]. —Etnier 1965: 147 [checklist]. —Flint 1968b: 45 [♂; ♀; distribution]. —Flint 1968a: 82 [distribution]. —Edwards 1973: 506 [distribution]. —Roy and Harper 1975: 1082 [distribution]. —Botosaneanu 1979: 49, 53 [distribution; ♂]. —Roy and Harper 1979: 152 [checklist]. —Blickle 1979: 53 [checklist]. —Parker and Voshell 1981: 4 [checklist]. —Swegman et al. 1981: 139 [distribution]. —Harris et al. 1982a: 511 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Waltz and McCafferty 1983a: 11 [distribution]. —Hamilton et al. 1983: 19 [distribution]. —Harris et al. 1984: 109 [distribution]. —Lake 1984: 220 [checklist]. —Bowles and Mathis 1989: 239 [distribution]. —Harris et al. 1991: 239 [distribution]. —Floyd 1992: 50 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton et al. 1993: 21 [distribution]. —Angrisano 1995a: 509 [distribution]. —Flint 1996a: 16 [checklist]. —Moulton and Stewart 1996: 123 [♂; distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Botosaneanu and Hyslop 1998: 12 [distribution]. —Houghton and Stewart 1998: 105 [biology; distribution]. —Angrisano 1999: 34 [checklist]. —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Botosaneanu 2002b: 87 [checklist]. —Pescador et al. 2004: 133 [checklist]. —Flint and Sykora 2004: 40 [distribution]. —Naranjo López and González Lazo 2005: 149 [checklist]. —Zeullig et al. 2006: 43 [distribution]. —Bowles et al. 2007: 22 [distribution; biology]. —Pérez-Gelabert 2008: 301 [checklist]. —Etnier 2010: 486 [distribution]. —Armitage et al. 2011: 14 [checklist]. —Houghton et al. 2011b: 6 [distribution]. —Myers et al. 2011: 108 [distribution]. —Harris et al. 2012: 9 [checklist]. —Wright et al. 2013: 466 [biology; distribution]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —DeWalt et al. 2016: 52 [distribution]. —Denson et al. 2016:

6 [distribution]. —Houghton 2016: 46 [biology]. —Houghton et al. 2017: 63 [checklist]. —Harris and Rasmussen 2019: 221 [♂; ♀; distribution]. —Mendez et al. 2019: 128 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, Cuba, Dominican Republic, Jamaica, Uruguay, U.S.A.

crutwelli Wells, 1991: 519 [type locality: Papua New Guinea, Eastern Highlands Province, Mt Gahavasuka Provincial Park, 6°06'S 145°23'E; ANIC; ♂].

Distribution. —Papua New Guinea.

cucullata Wells, 1984: 272 [type locality: [Papua] New Guinea, NE., Mt Kaindi, 2100–2350 m; BPBM; ♂]. —Neboiss 1986: 89 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

curta Kingsolver & Ross, 1961: 33 [type locality: [United States], Florida, Temple Terrace; INHS; ♂]. —Blickle 1979: 53, 59 [checklist; ♂]. —Roy and Harper 1979: 152 [checklist]. —Roy and Harper 1981: 105 [distribution]. —Harris et al. 1982a: 511 [distribution]. —Harris et al. 1991: 240 [distribution]. —Abbott et al. 1997: 44 [distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Houghton et al. 2001: 505 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Etnier 2010: 486 [distribution]. —Harris et al. 2012: 9 [checklist]. —Houghton 2016: 46 [biology]. —Denson et al. 2016: 6 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Harris and Rasmussen 2019: 222 [♂; ♀; distribution].

Distribution. —Canada, U.S.A.

curvata (Ulmer, 1951): 77 [type locality: [Indonesia], Java, Buitenzorg; ZMUH; ♂; in *Javanotrichia*]. —Malicky and Chantaramongkol 2007: 1040 [♂; distribution]. —Malicky 2010a: 50 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

cuspidigera Zhou & Yang in Zhou et al. 2010: 38 [type locality: [China], Jiangxi Province, Jiu Lian Shan National Nature Reserve, Da-Qiu-Tian, 8.2 KM northwest of Da-Qiu-Tian, 114°25'50"E, 24°34'15"N, 425 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

damasi Marlier, 1943: 31 [type locality: [Congo], Ishango; depository not designated; ♂].

Distribution. —Congo.

dampfi (Ulmer, 1963): 268 [type locality: [Egypt], Maadi, am Licht; ZMUH; ♂; in *Javanotrichia*]. —Malicky 1983b: 54 [atlas; ♂]. —Malicky 2004a: 68 [atlas]. —Malicky 2005b: 545 [checklist].

Distribution. —Egypt.

dapola Guenda, 1996: 245 [type locality: [Burkina Faso], Dapola dans le cours inférieur du Mouhoun; UOBF; ♂].

Distribution. —Burkina Faso.

dentata Kingsolver & Ross, 1961: 33 [type locality: [United States], Florida, Temple Terrace; INHS; ♂]. —Blickle 1979: 53, 59 [checklist; ♂]. —Harris et al. 1982a: 511 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Flint et al. 1994:

4 [distribution]. —Harris et al. 2012: 9 [checklist]. —Denson et al. 2016: 6 [distribution]. —Harris and Rasmussen 2019: 225 [♂; ♀; distribution].

Distribution. —U.S.A.

deukalion Malicky & Prommi in Malicky et al. 2000: 862 [type locality: [Thailand], Doi Suthep NP, Huai Koo Kao, 550 m; Collection Malicky; ♂]. —Malicky 2010a: 47 [atlas; ♂].

Distribution. —Thailand.

digitata Wells, 1984: 281 [type locality: [Papua] New Guinea, Mendi, 1497 m; ANIC; ♂]. —Neboiss, 1986: 91 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

dikirilagoda Schmid, 1958b: 63 [type locality: [Sri Lanka] Ceylan, Le Vallon, Diyaluma Falls (Uva, 800 ft) 21-II), gros rochers arrosés par les embruns d'une chute, haute et abondante; depository not designated; ♂].

Distribution. —Sri Lanka.

dilgri Wells, 1983: 640 [type locality: Australia, New South Wales, Dilgry R., 19 km NW. Rawdon Vale, 151°32'E 31°53'S; NMV; ♂; ♀]. —Neboiss 1986: 86 [atlas; ♂; ♀].

Distribution. —Australia.

discedata Zhou & Morse in Zhou et al. 2010: 34 [type locality: [China], Fujian Province, Jiu-qu-xi, 118°01'12"E, 27°27'00"N, 220 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

disparalis Wells, 1984: 276 [type locality: [Papua] New Guinea, NE., Wau, Big Wau Creek, 1300 m; BPBM; ♂]. —Neboiss 1986: 90 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

ditenga Wells, 1990b: 397 [type locality: [Indonesia] Sulawesi Utara, Motolanga R., Doloduo-Malibagu road; NMV; ♂]. —Wells and Huisman 2001: 212 [distribution].

Distribution. —Indonesia.

divaricata Wells, 1983: 639 [type locality: Australia, Queensland, Upper Freshwater Creek.; NMV; ♂]. —Neboiss 1986: 95 [atlas; ♂].

Distribution. —Australia.

echidna Malicky, 1999a: 345 [type locality: [Yemen], Provinz Al-Mahwit, 30 km NE Bajil, 5 km NNE Khamis Bani Sa'd, 750 m, 15°1'N, 43°32'E; Collection Malicky; ♂]. —Malicky 2004a: 69 [atlas]. —Malicky 2005b: 545 [checklist].

Distribution. —Yemen.

egena Mey, 1998a: 552 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

eltera Oláh, 2012: 50 [type locality: Indonesia, Raja Empat Archipelago, Batanta Island, Warmon Creek, 1. waterfall; ANIC; ♂]. —Oláh 2013: 69 [distribution]. —Oláh and Kovács 2018: 181 [distribution].

Distribution. —Indonesia.

ensiformis Wells, 1984: 281 [type locality: [Papua] New Guinea, D.P.I. Urimo Station; ANIC; ♂]. —Neboiss 1986: 94 [atlas; ♂]. —Wells 1991: 526 [checklist]. —Wells and Dostine 2016: 599 [distribution].

Distribution. —Australia, Papua New Guinea.

epupae Mey & de Moor, 2019: 142 [type locality: Namibia, Kunene River, Epupa Falls, 17°00.127'S, 13°14.742'E; ZMHB; ♂].

Distribution. —Namibia.

eurhinata Wells, 1985a: 102 [type locality: Australia, Northern Territory, Georgetown Billabong, nr Jabiru; NTM; ♂]. —Neboiss 1986: 88 [atlas; ♂]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

exigua Wells, 1979a: 616 [type locality: [Australia] Western Australia, Fine Spring Creek, on road between Lake Argyle Tourist Village and Duncan Highway; WAM; ♂]. —Neboiss 1986: 92 [atlas; ♂]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

extensa Martynov, 1935: 117 [type locality: [India], above Kapildhara Fall, Rewah State, C. I.; NZSI; ♂]. —Malicky 2006: 253 [checklist]. —Malicky and Chantaramongkol 2007: 1040 [♂; distribution]. —Mattern 2015: 501 [distribution]. —Malicky 2018: 49 [checklist].

Distribution. —India, Nepal.

feltuna Oláh, 2016: 114 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂].

Distribution. —Indonesia.

ferreirae Wells & de Moor, 2020: 508 [type locality: Angola, Moxico Province, Cuembo River, Site 6 — Cuembo campsite bridge, -13.5265, 19.27971AGMS; ♂].

Distribution. —Angola.

fimbriata Wells, 1991: 519 [type locality: Papua New Guinea, Central Province, Veikabu; ANIC; ♂]. —Wells and Huisman 2001: 212 [distribution].

Distribution. —Indonesia, Papua New Guinea.

flabella Wells, 1983: 637 [type locality: Australia, Victoria, McKenzie R., Princes Highway bridge, 25 km W. Cann River; NMV; ♂]. —Neboiss 1986: 96 [atlas; ♂].

—*lapka* Oláh and Johanson 2010a: 47 [type locality: Australia, Tasmania, Ewart Creek, 150 m downstream bridge on A10, 41°58.576'S 145°27.708'E, 221 m; ANIC; ♂]. —Wells 2012: 67 [to synonymy].

Distribution. —Australia.

fonalka Oláh & Johanson, 2010a: 44 [type locality: Hong Kong, Sai Kung East Country Park, stream, 1.2 km E Tin Mei Shan Mt., at Luk Wu; NHRS; ♂]. —Malicky 2013: 43 [possibly a junior synonym to *Orthotrichia momanga*]. —Yang et al. 2016: 476 [checklist].

Distribution. —Hong Kong.

fontinala Wells, 1990c: 121 [type locality: [Australia] NE Queensland, Yuccabine Creek; NTM; ♂].

Distribution. —Australia.

fortificata Mey, 1998a: 553 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

foruma Oláh, 2016: 115 [type locality: [Indonesia], West Papua, Batanta Island, right side stream of Forum River, 0°52'22.7", 130°27'45.1"; Collection Oláh; ♂]. —Oláh and Kovács 2018: 181 [distribution].

Distribution. —Indonesia.

fosla Oláh in Oláh and Kovács 2018: 182 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalijakut River, 00°52'49.1"S, 130°38'04.9"E; Collection Oláh; ♂].

Distribution. —Indonesia.

fragilis Wells, 1984: 274 [type locality: [Western New Guinea], Irian Jaya (New Guinea); BPBM; ♂]. —Neboiss 1986: 89 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Indonesia.

furcata Wells, 1990c: 121 [type locality: [Australia] Northern Territory, South Alligator River above Fisher Creek junction; NTM; ♂].

Distribution. —Australia.

garbunga Wells, 1990b: 398 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Fog 11, NHMUK Plot A; NHMUK; ♂]. —Wells and Huisman 2001: 213 [distribution].

Distribution. —Indonesia.

glebula Wells, 1984: 276 [type locality: [Papua] New Guinea, NE., Morobe District, 10 km W. Bulolo, 780 m; BPBM; ♂]. —Neboiss 1986: 90 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

gorbek Oláh, 2016: 116 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂]. —Oláh and Kovács 2018: 182 [distribution].

Distribution. —Indonesia.

gracilis Wells, 1979a: 610 [type locality: [Australia] New South Wales, Coraki; ANIC; ♂; ♀]. —Neboiss 1986: 92 [atlas; ♂; ♀].

Distribution. —Australia.

gressitti Wells, 1991: 523 [type locality: Papua New Guinea, New Ireland, SW., 'Camp Bishop', 15 km up Kait River; BPBM; ♂]. —Wells 2005: 389 [♂; distribution, parasitoid behavior observed].

Distribution. —Australia, Papua New Guinea.

gudiel Malicky & Graf, 2015: 31 [type locality: Ethiopia, Kleiner Waldbach N von Addis Abeba, 9°05'N, 38°43'E, 2800 m; Collection Malicky; ♂].

Distribution. —Ethiopia.

guinkoi Guenda, 1996: 243 [type locality: [Burkina Faso], Zindi; UOBF; ♂].

Distribution. —Burkina Faso.

gurulubela (Schmid, 1958b): 59 [type locality: [Sri Lanka], Ceylan, Beliul Oya (Sab., 2000 ft) 19-II, ruisseaux torrentueux, dans les buissons; depository not designated; ♂; in *Baliotrichia*].

Distribution. —Sri Lanka.

hajla Oláh & Johanson, 2010a: 46 [type locality: Indonesia, Sumba, Lewa, Lainguru National Park, dried river bed, 400 m; Collection Oláh; ♂].

Distribution. —Indonesia.

hanulva Oláh, 2016: 117 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalijakut River, 0°52'49.1", 130°38'4.9"; Collection Oláh; ♂].

Distribution. —Indonesia.

hinipitigola (Schmid, 1958b): 60 [type locality: [Sri Lanka], Ceylan, Della (Sab., 1500 ft) 18-II, petite rivière affluente de la Kalu Ganga, encaissée et agitée, dans la jungle; depository not designated; ♂; in *Baliotrichia*].

Distribution. —Sri Lanka.

hippomenes Malicky, 2004b: 295 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), unweit des Wehrs des Babai Flusses, über das die Brücke der Ost-West-Hauptstraße Nepals (Mahindra Highway), 28°25'N, 81°23'E, 190 m, Budhi Khola; Collection Malicky; ♂]. —Malicky 2006: 253 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

holaga Oláh in Oláh and Kovács 2018: 183 [type locality: Indonesia, West Papua, Batanta Island, Northern coast, Warmon stream, above second waterfall, S00°50'29.47", E130°42'29.16"; Collection Oláh; ♂].

Distribution. —Indonesia.

huaihuat Malicky & Chantaramongkol, 2007: 1033 [type locality: Thailand, Huai Huat NP, 16°55'N 104°11'E, 400 m; Collection Malicky; ♂]. —Malicky 2010a: 45 [atlas; ♂]. —Malicky et al. 2014c: 33 [distribution, as *O. huayhuat*].

Distribution. —Cambodia, Thailand.

hydroptiloides Wells & Andersen, 1995: 165 [type locality: Tanzania, Morogoro region, Morogoro, Sokoine University of Agriculture, 550 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

ifugao Wells & Mey, 2002: 134 [type locality: [Philippines] Luzon, Ifugao Province, Jacmal Bunhian, 24 km E Mayoyao, 800–1000 m; BPBM; ♂].

Distribution. —Philippines.

indah Malicky, Melnitsky, & Ivanov, 2014a: 833 [type locality: [Indonesia] Papua, Insel Biak, Wardo, Wapsdori Wasserfall, 1°01'22"S 135°51'25"E, 10–40 m Seehöhe; ZIN; ♂].

Distribution. —Indonesia.

indica Martynov, 1935: 116 [type locality: [India], Inlé Lake, S. Shan States.; NZSI; ♂]. —Schmid 1958b: 58 [distribution]. —Oláh 1989: 288 [distribution]. —Wells and Malicky 1997: 188 [distribution]. —Malicky and Chantaramongkol 2007: 1042 [distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson

2010a: 46 [distribution]. —Malicky 2010a: 52 [atlas; ♂]. —Malicky et al. 2014b: 46 [distribution]. —Wityi et al. 2015: 47 [distribution].

Distribution. —India, Indonesia, Laos, Malaysia, Myanmar, Sri Lanka, Thailand, Vietnam.

inornata Wells, 1979a: 605 [type locality: [Australia] Western Australia, Mitchell Plateau; WAM; ♂]. —Neboiss 1986: 88 [atlas; ♂]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

instabilis Denning, 1948: 397 [type locality: [United States], Florida, Winter Park; ESUW; ♂]. —Blickle and Morse 1957: 48 [distribution; ♀]. —Kingsolver and Ross 1961: 29 [♂; distribution]. —Blickle 1979: 53, 59 [checklist; ♂]. —Bowles and Mathis 1989: 239 [distribution]. —Harris et al. 1991: 241 [distribution]. —Moulton and Stewart 1996: 123 [♂; distribution]. —Moulton and Stewart 1997: 350 [checklist]. —Abbott et al. 1997: 44 [distribution]. —Pescador et al. 2004: 133 [checklist]. —Etnier 2010: 486 [distribution]. —Harris et al. 2012: 9 [checklist]. —Denson et al. 2016: 6 [distribution]. —Harris and Rasmussen 2019: 227 [♂; ♀; distribution].

Distribution. —U.S.A.

iriga Wells & Mey, 2002: 132 [type locality: [Philippines] Luzon Is., Camarines Sur Prov., Mt Iriga, 500–600 m; BPBM; ♂].

Distribution. —Philippines.

iriomotensis Ito, 2013: 43 [type locality: Japan, Ryûkyû Islands, Iriomote-jima, Airagawa, beside Route 217, 24°20'03"N, 123°54'47"E, 3 m above sea level; CBM-ZI; ♂; ♀]. —Tanida and Kuranishi 2016: 71 [checklist].

Distribution. —Japan.

itintikah Malicky, 2014c: 43 [type locality: Thailand, Prov. Nan, NP Mae Charim, 260 m, 18°36'N, 100°58'E; Collection Malicky; ♂].

Distribution. —Thailand.

jani Wells & Huisman, 1993: 112 [type locality: East Malaysia, Sabah, Long Pa Sia area, Sg. Ritan, 04°24'N 115°42'E, 1160 m; RMNH; ♂]. —Malicky 2010a: 51 [atlas; ♂].

Distribution. —Malaysia.

jembatana Wells, 1990b: 398 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Site 6; NHMUK; ♂].

Distribution. —Indonesia.

jethran Malicky, Ivanov, & Melnitsky, 2011: 1492 [type locality: [Indonesia], Lombok, Kembangkuning, 4 km N Kotaraja, 490 m, 8°33'33"S, 116°25'23"E; ZIN; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

kabaenica Wells & Huisman, 2001: 211 [type locality: Sulawesi Tenggara, P. Kabaena, 4 km S Tankeno, Sungai Lakambula, 300 m; RMNH; ♂].

Distribution. —Indonesia.

kaitica Wells, 1991: 521 [type locality: Papua New Guinea, New Ireland, SW., ‘Camp Bishop’, 15 km up Kait River, 4°23'S 152°41'E; BPBM; ♂].

Distribution. —Papua New Guinea.

kalengiensis Statzner, 1977: 403 [type locality: Zaire, Kivu Region, Kalengo stream 10 km west of Lake Kivu; ZMHB; ♂; ♀].

Distribution. —Congo.

kalisa Oláh, 2016: 118 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂].

Distribution. —Indonesia.

kaonan Malicky, Suwannarat, & Laudee, 2018: 1320 [type locality: Thailand, Huai Vat (Nebenbach des Klong Kay) bei Ban Pak Lang, nahe dem Kao Nan Nationalpark, 8°47'N, 99°35'E, 140 m; Collection Malicky; ♂].

Distribution. —Thailand.

kerekded Oláh, 2016: 119 [type locality: Indonesia, West Papua, Batanta Island, Kalijakut River, 0°5'52.0", 130°38'8.0"; Collection Oláh; ♂].

Distribution. —Indonesia.

kholoensis Wells, 1979a: 612 [type locality: [Australia] Queensland, Brisbane River near Kholo; NMV; ♂]. —Neboiss 1986: 92 [atlas; ♂].

Distribution. —Australia.

kinabalu Malicky & Chantaramongkol, 2007: 1043 [type locality: Malaysia, Sabah, Kinabalu NP, Livagu river, 1410 m; Collection Malicky; ♂]. —Malicky 2010a: 49 [atlas; ♂].

Distribution. —Malaysia.

kisbunka Oláh, 2012: 50 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Warmon Creek, 2. waterfall, 0°50'23.25"S 130°42'35.18"E; Collection Oláh; ♂].

Distribution. —Indonesia.

kivuensis Jacquemart, 1956: 5 [type locality: [Congo], Bukavu, au large; IRSNB; ♂; ♀]. —Jacquemart 1957: 124 [♂; distribution].

Distribution. —Congo.

kokodana Kimmins, 1962: 104 [type locality: [Indonesia], Papua, Kokoda, 1200 ft; NHMUK; ♂]. —Neboiss 1986: 89 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Indonesia.

krungut Wells, 1991: 517 [type locality: Papua New Guinea, Central Province, Laloki River at Rouna Falls, 9°25'S 147°27'E; ANIC; ♂].

Distribution. —Papua New Guinea.

kunenensis Mey & de Moor, 2019: 141 [type locality: Namibia, Kunene River, Swartbooisdrif, Kunene River Lodge, 17°20'50"S, 13°52'56"E; ZMHB; ♂].

Distribution. —Namibia.

lalonduwasi Wells & Huisman, 2001: 211 [type locality: Sulawesi Tenggara, N slope of Gunung Watuwila, 1100 m, Sungai Lalonduwasi; RMNH; ♂].

Distribution. —Indonesia.

lanna Malicky & Chantaramongkol, 2007: 1040 [type locality: Thailand, Chiang Dao WRS, 19°22'N 98°55'E, 500 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 49 [distribution]. —Malicky 2010a: 44 [atlas; ♂].

Distribution. —Laos, Thailand.

laposka Oláh, 2013: 69 [type locality: Indonesia, Papua, Raja Ampat, Batanta Island, northern coast, Waridor River, S 0.84373°, E 130.52457°, shippable endpoint; Collection Oláh; ♂].

Distribution. —Indonesia.

latiramifera Zhou & Yang in Zhou et al. 2010: 32 [type locality: [China], Jiangxi Province, Jiu Lian Shan National Nature Reserve, Unnamed trib. of Xia-Gong-Tang Stream, 114°28'08"E, 24°32'05"N, 630 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

lebar Wells & Huisman, 1993: 112 [type locality: East Malaysia, Sarawak, Bako National Park, Sungai Delima; RNTM; ♂]. —Malicky 2010a: 51 [atlas; ♂].

Distribution. —Malaysia.

lentigo Wells, 1984: 274 [type locality: [Papua] New Guinea, NE., Wau, McAdam Park, 1250 m; BPBM; ♂]. —Neboiss 1986: 90 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

ligula Mey & Freitag, 2019: 209 [type locality: [Philippines], Palawan, Puerto Princesa, Brgy. Cabayugan, spring creek of Cabayugan River, SSW of Martarpi, 10°09'46"N, 118°49'29"E, 80 m a.s.l.; MPMP; ♂; ♀]. —Mey and Freitag 2020: 57 [distribution].

Distribution. —Philippines.

litoralis (Ulmer, 1951): 89 [type locality: [Indonesia], Bali, Litoral des Batur-Sees, 1031 m; ZMUH; ♂; in *Baliostrichia*]. —Wells and Malicky 1997: 190 [distribution]. —Malicky and Chantaramongkol 2007: 1033 [♂; distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 49 [distribution]. —Malicky 2010a: 45 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Mattern 2015: 501 [checklist; as *littoralis*]. —Melnitsky et al. 2019: 539 [distribution].

—*kasyi* Chantaramongkol & Malicky, 1986: 516 [type locality: [Sri Lanka], North Central Province, Kantalai, 60 m; MZLU; ♂]. —Malicky and Chantaramongkol 2007: 1033 [to synonymy].

—*veikaba* Wells, 1991: 516 [type locality: Papua New Guinea, Central Province, Veikabu; ANIC; ♂]. —Malicky and Chantaramongkol 2007: 1033 [to synonymy]. —Wells and Dostine 2016: 599 [distribution].

Distribution. —Australia, Indonesia, Laos, Nepal, Papua New Guinea, Sri Lanka, Thailand, Vietnam.

litoris Mey, 2006b: 204 [type locality: Indonesia, Sulawesi Selatan, Soroako, Lake Matano; LIPI; ♂].

Distribution. —Indonesia.

litotes Wells, 1984: 272 [type locality: [Papua] New Guinea, Mendi, 1497 m; ANIC; ♂]. —Neboiss 1986: 90 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

lobophorana Mey, 2003b: 434 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

luonga Oláh, 1989: 289 [type locality: Vietnam, Bac Thai Province, Phuluong, River Dongdat; HNHM; ♂]. —Wells and Huisman 2001: 214 [distribution]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 50 [atlas; ♂].

Distribution. —Indonesia, Vietnam.

luzofortificata Mey, 2003b: 434 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

mackayi Wells, 1991: 521 [type locality: Papua New Guinea, West Highlands Province, Baiyer River Sanctuary, Trauna River, 5°30'S 144°10'E; ANIC; ♂; larva; case].

Distribution. —Papua New Guinea.

madagassa Oláh & Johanson, 2010a: 49 [type locality: Madagascar, Perinet; MNHN; ♂].

Distribution. —Madagascar.

maeandrica (Ulmer, 1951): 76 [type locality: [Indonesia], Java, Buitenzorg, Bellevue; ZMUH; ♂; in *Javanotrichia*]. —Wells and Malicky 1997: 187 [distribution]. —Malicky and Chantaramongkol 2007: 1038 [♂; distribution]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 50 [distribution]. —Malicky 2010a: 48 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Promwong and Thapanya 2019: 75 [distribution].

Distribution. —Indonesia, Laos, Malaysia, Thailand, Vietnam.

mahisindha Oláh & Johanson, 2010a: 51 [type locality: India, Rajasthan, Mahi River, Banswara; Collection Oláh; ♂].

Distribution. —India.

marsyas Malicky, 2004b: 295 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, vom “westlicher” Bach, 320 m; Collection Malicky; ♂]. —Malicky 2006: 253 [checklist]. —Mattern 2015: 501 [distribution].

Distribution. —Nepal.

mas Malicky & Graf, 2012: 32 [type locality: [Ethiopia], Meribo River; Collection Malicky; ♂].

Distribution. —Ethiopia.

masola Oláh & Johanson, 2010a: 52 [type locality: Australia, Queensland, Kondallilla Falls Section, Picnic Creek, dstr waterfall next to track, 26°40.236'S 152°52.116'E, 169 m; ANIC; ♂].

Distribution. —Australia.

medipitigola (Schmid, 1958b): 59 [type locality: [Sri Lanka], Ceylan, Nuwara Eliya (C. P., 6000 ft) 25-II, marais à Carex, aus bords septentrionaux du Gregory Lake; depository not designated; ♂; in *Baliostrichia*].

Distribution. —Sri Lanka.

melitta Malicky, 1976: 93 [type locality: Greece, Insel Lesbos, Ayia Paraskevi; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 55 [atlas; ♂]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 149 [♂]. —Botosaneanu 1992: 103 [♂; ♀]. —Malicky 2004a: 68, 69 [atlas]. —Malicky 2005b: 544 [checklist]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 66 [distribution]. —Malicky 2014b: 17 [teratological structures]. —Dia 2015: 51 [distribution].

Distribution. —Bulgaria, Greece, Lebanon, Turkey.

menarika Wells, 1990b: 395 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Tumpah R. and tributary junction; NMV; ♂; ♀]. —Mey 2006b: 204 [distribution].

Distribution. —Indonesia.

mencenga Wells, 1990b: 404 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Site 6; NHMUK; ♂].

Distribution. —Indonesia.

menjonkok Wells & Malicky, 1997: 189 [type locality: [Indonesia] N Sumatra, Huta Padang, 02°45'N 99°14'E; Collection Malicky; ♂]. —Malicky and Chantaramongkol 2007: 1041 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 52 [atlas; ♂].

Distribution. —Indonesia, Thailand.

meysi Wells & de Moor, 2020: 508 [type locality: Angola, Moxico Province, Cuembo River, Site 9 — Cuembo source lake (Salia Kembo), -13.1363, 19.04529; AGMS; ♂].

Distribution. —Angola.

minalwang Wells & Mey, 2002: 132 [type locality: [Philippines] Mindanao, Misamis Or., Minalwang, 1050 m; BPBM; ♂].

Distribution. —Philippines.

mlamboi Wells & de Moor, 2020: 507 [type locality: Angola, Huila Province, Cubango River, Site 21 — downstream of rapids at ruins of hydropower plant, -14.3384, 16.29331; AGMS; ♂].

Distribution. —Angola.

momanga Oláh, 1989: 290 [type locality: Vietnam, Bac Thai Province, Quang Chu; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 47 [atlas; ♂]. —Malicky 2013: 43 [possibly a senior synonym to *O. fonalka*].

Distribution. —Vietnam.

monga Oláh & Johanson, 2010a: 53 [type locality: Vietnam, Lamdong Province, Dalat, Prenn Waterfall; Collection Oláh; ♂].

Distribution. —Vietnam.

morula Wells, 1979a: 608 [type locality: [Australia] Queensland, Mossman Gorge; ANIC; ♂; ♀]. —Wells 1985b: 30 [case]. —Neboiss 1986: 91 [atlas; ♂; ♀].

Distribution. —Australia.

- moselyi*** Tjeder, 1946: 133 [type locality: [Israel], Palestine, Dagan A., Jordan Valley, 670 ft. below the sea; NHMUK; ♂]. —Botosaneanu and Gasith 1971: 98 [distribution]. —Gasith and Kugler 1973: 57 [distribution; biology]. —Malicky 1983b: 55 [atlas; ♂]. —Moubayed and Botosaneanu 1985: 63 [distribution]. —Botosaneanu 1992: 99 [♂; ♀]. —Malicky 1999a: 344 [distribution]. —Malicky 2004a: 69 [atlas]. —Malicky 2005b: 545 [checklist]. —Dia 2015: 51 [distribution].
Distribution. —Israel, Lebanon, Yemen.
- mulehe*** Malicky, 2020: 510 [type locality: Uganda, Lkw Mulehe; collection Malicky; ♂].
Distribution. —Uganda.
- muscari*** Wells, 1983: 638 [type locality: Australia, Queensland, Iron Range, Middle Claudie R.; NMV; ♂]. —Neboiss 1986: 95 [atlas; ♂]. —Wells 1990c: 125 [case; distribution]. —Wells 1992: 299 [reported to be a parasitoid of Hydropsychidae pupae]. —Wells 2005: 385 [additional observations of parasitoid behavior]. —Wells et al. 2019: 33 [detection frequency].
Distribution. —Australia.
- mussoi*** Guenda, 1996: 247 [type locality: [Burkina Faso], à Zindi près de Gaoua dans le cours inférieur du Mouhoun; UOBF; ♂].
Distribution. —Burkina Faso.
- namnao*** Malicky & Chantaramongkol, 2007: 1038 [type locality: Thailand, Nam Nao NP, 16°38'N 101°35'E, 800 m; Collection Malicky; ♂]. —Malicky 2010a: 44 [atlas; ♂].
Distribution. —Thailand.
- nehega*** Oláh, 2016: 120 [type locality: Indonesia, West Papua, Batanta Island, Kalijakut River, 0°52'52.0", 130°38'8.0"; Collection Oláh; ♂]. —Oláh and Kovács 2018: 184 [distribution].
Distribution. —Indonesia.
- nessos*** Malicky & Chantaramongkol, 2007: 1038 [type locality: [Indonesia] Sumatra, Tinggi Raja, 3°09'N 98°48'E, 300 m; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Oláh and Johanson 2010a: 54 [distribution]. —Malicky 2010a: 45 [atlas; ♂].
Distribution. —Indonesia.
- newi*** Wells & Huisman, 1993: 111 [type locality: East Malaysia, Sabah, Tenom; NTM; ♂]. —Malicky 2010a: 50 [atlas; ♂].
Distribution. —Malaysia.
- nigrovillosa*** Wells & Andersen, 1995: 165 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 10, 1420 m a.s.l.; ZMUB; ♂].
Distribution. —Tanzania.
- nontaburi*** Malicky & Chantaramongkol, 2007: 1042 [type locality: Thailand Fluss Chaopraya bei Nontaburi; Collection Malicky; ♂]. —Malicky 2010a: 50 [atlas; ♂].
Distribution. —Thailand.
- nova*** Marlier, 1978: 295 [type locality: Mali, Pont de Kouoro; MRAC; ♂]. —Guenda 1996: 247 [distribution]. —Wells and de Moor 2020: 512 [checklist].
Distribution. —Angola, Burkina Faso, Mali.

obscura Kimmins, 1962: 103 [type locality: [Indonesia], Papua, Kokoda, 1200 ft; NHMUK; ♂]. —Neboiss 1986: 89 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Indonesia.

obtecta Wells & Dudgeon, 1990: 173 [type locality: Hong Kong, Tai Po Kao Forest stream; NHMUK; ♂; ♀]. —Zhou et al. 2010: 40 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —Hong Kong.

olelo Oláh, 2013: 71 [type locality: Indonesia, Batanta Island, northern coast, small stream with Dry mouth, 1000–1500 m above Dry mouth; Collection Oláh; ♂]. —Oláh 2016: 121 [distribution]. —Oláh and Kovács 2018: 184 [distribution].

Distribution. —Indonesia.

ops Malicky & Chantaramongkol, 2007: 1039 [type locality: [Indonesia] Sumatra, Aceh, Kruet Selatan NP, 2°59'N 97°23'E, 0 m; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 48 [atlas; ♂].

Distribution. —Indonesia.

orbostensis Wells, 1979a: 596 [type locality: [Australia] Victoria, Brodribb River, Sardine Creek Track, 39 km N. of Orbost; NMV; ♂]. —Neboiss 1986: 87 [atlas; ♂].

Distribution. —Australia.

orias Oláh, 2013: 73 [type locality: Indonesia, Papua, Raja Ampat, Batanta Island, northern coast, Warmon stream, above second waterfall, 0.84152°S, 130.70810°E; Collection Oláh; ♂].

Distribution. —Indonesia.

ostoros Oláh & Johanson, 2010a: 56 [type locality: Malaysia, Sabah, Tawau, Maliau Basin, Nepenthes Camp, Camel Trophy Hut, 4°43'59.3"N 116°52'39.7"E, 999 m; NHRS; ♂].

Distribution. —Malaysia.

palikos Malicky & Chantaramongkol, 2007: 1039 [type locality: Thailand, Doi Inthanon NP, Mae Klang bei Ban Sob Aeb, 18°32'N 98°36'E, 540 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 57 [distribution]. —Malicky 2010a: 44 [atlas; ♂].

Distribution. —Laos, Thailand.

para Oláh, 2012: 50 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Site B, small stream, 250 m from mouth, 0°48'47.08"S 130°38'18.91"E; Collection Oláh; ♂]. —Oláh 2016: 121 [distribution]. —Oláh and Kovács 2018: 184 [distribution].

Distribution. —Indonesia.

paranga Wells, 1979a: 614 [type locality: [Australia] Western Australia, Ord Dam, at light below dam; WAM; ♂]. —Neboiss 1986: 92 [atlas; ♂]. —Wells 1990c: 123 [case; distribution]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

parthenopaios Malicky & Chantaramongkol, 2007: 1033 [type locality: Thailand, Pitsanulok Prov., Phu Hin Rongkla NP, Huai Kamunnoi WF, 16°59'N 101°00'E, ; Collection Malicky; ♂]. —Malicky 2010a: 45 [atlas; ♂].

Distribution. —Thailand.

parthenos Malicky & Chantaramongkol, 2007: 1038 [type locality: Thailand, Sai Yok NP, 14°26'N 98°51'E, 100 m; Collection Malicky; ♂]. —Malicky 2010a: 48 [atlas; ♂]. —Malicky et al. 2014c: 33 [distribution].

Distribution. —Cambodia, Thailand.

pectinella Wells, 1983: 635 [type locality: Australia, Victoria, Warburton, Yarra R.; NMV; ♂]. —Wells 1985b: 32 [larva; case; pupa]. —Neboiss 1986: 96 [atlas; ♂]. —Wells 2010a: 52 [♂].

Distribution. —Australia.

pentheseleia Malicky & Chantaramongkol, 2007: 1031 [type locality: Thailand, Kao Soi Dao NP, 13°06'N 102°12'E, 300–400 m; Collection Malicky; ♂]. —Malicky 2010a: 43 [atlas; ♂].

Distribution. —Thailand.

persephone Malicky, 2008a: 838 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 47 [atlas; ♂].

Distribution. —Indonesia.

pethericki Wells & Dostine, 2016: 597 [type locality: [Australia] Northern Territory, Petherick's Rainforest Reserve, 13°7.424'S 130°39.920'E; NTM; ♂].

Distribution. —Australia.

petiti Jacquemart, 1962b: 4 [type locality: Congo, Katanga, Sandoa; IRSNBM; ♂]. —Guenda 1996: 247 [♂; distribution]. —de Moor et al. 2000: 112 [distribution]. —Mey and de Moor 2019: 137 [checklist].

Distribution. —Burkina Faso, Congo, Namibia.

polyhymnia Malicky, 2008a: 838 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 44 [atlas; ♂].

Distribution. —Indonesia.

polyxena Malicky & Chantaramongkol, 2007: 1031 [type locality: Thailand, ob Ton Nga Chang WF, 6°58'N 100°12'E, 600 m; Collection Malicky; ♂]. —Malicky 2010a: 43 [atlas; ♂].

Distribution. —Thailand.

prenna Oláh & Johanson, 2010a: 57 [type locality: Vietnam, Lamdong Province, Dalat, Prenn waterfall; Collection Oláh; ♂].

Distribution. —Vietnam.

prevoti Guenda, 1996: 245 [type locality: [Burkina Faso], Zindi; UOBF; ♂].

Distribution. —Burkina Faso.

priapos Malicky & Chantaramongkol, 2007: 1032 [type locality: Thailand, Tung Salaeng NP, 16°49'N, 100°57'E, 600 m; ♂]. —Malicky 2010a: 43 [atlas; ♂].

Distribution. —Thailand.

putoei Malicky & Chantaramongkol, 2007: 1035 [type locality: Thailand, Putoei NP, headquarters, 14°57'N, 99°28'E, 250 m; Collection Malicky; ♂].

Distribution. —Thailand.

ranauana (Ulmer, 1951): 80 [type locality: [Indonesia], Sumatra, Ranau-See, Brandungsufer; ZMUH; ♂; in *Orthotrichiella*]. —Malicky 1998a: 797 [♂; distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 51 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

rentzi Wells, 2010a: 51 [type locality: [Australia] North Queensland, 17°05'S 145°35'E, Mt Haig, 22 km NE by N of Atherton; ANIC; ♂].

Distribution. —Australia.

rostrata Wells, 1979a: 598 [type locality: [Australia] Western Australia, Spillway Creek, Ord River Dam; WAM; ♂; ♀]. —Neboiss 1986: 86 [atlas; ♂; ♀].

Distribution. —Australia.

runching Wells & Huisman, 1993: 111 [type locality: East Malaysia, Sabah, 12 km NNE Ranau, Poring Hot Springs, Sg. Kipogoh, 06°03'N 116°42'E. 550 m; RMNH; ♂]. —Malicky 2010a: 51 [atlas; ♂].

Distribution. —Malaysia.

sabazios Malicky & Chantaramongkol, 2007: 1035 [type locality: Bhutan, Punakha, Dungkar Rongchhu, 27°39'N 89°46'E, 1370 m; Collection Malicky; ♂].

Distribution. —Bhutan.

sanya Mosely, 1948a: 45 [type locality: [Malawi, Lake Malawi], Lake Nyasa, Fort Johnston; NHMUK; ♂]. —Jacquemart 1957: 123 [♂; distribution]. —Mey 2011: 343, 345 [distribution; checklist]. —Mey 2016: 305 [distribution].

Distribution. —Congo, Malawai, Namibia.

savoska Oláh, 2012: 51 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Sarinam River, 0°50'04.24"S 130°47'59.22"E; Collection Oláh; ♂]. —Oláh 2016: 121 [distribution].

Distribution. —Indonesia.

scutata Wells, 1979a: 600 [type locality: [Australia] Western Australia, Spillway Creek, Ord River Dam; WAM; ♂; ♀]. —Neboiss 1986: 87 [atlas; ♂; ♀]. —Wells 1990c: 125 [case; distribution].

Distribution. —Australia.

scutellata Wells & Andersen, 1995: 165 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 5, 1650 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

serrata Wells, 1990c: 121 [type locality: [Australia] Northern Territory, Kakadu National Park, Radon Springs, 12°45'S 132°55'E; NTM; ♂].

Distribution. —Australia.

shawkah Malicky & Chantaramongkol, 2007: 1034 [type locality: United Arab Emirates, Wadi Wurayah; Collection Malicky; ♂].

Distribution. —United Arab Emirates.

shimigaya Harris & Davenport, 1999: 29 [type locality: Peru, Loreto, small stream just outside grounds of Explorama Inn; NMNH; ♂].

Distribution. —Peru.

sibuyan Malicky & Chantaramongkol, 2007: 1034 [type locality: Philippinen, Sibuyan, Prov. Romblon, Magdiwant; Collection Malicky; ♂]. —Malicky 2009b: 10 [distribution].

Distribution. —Philippines.

sinit Wells & Huisman, 1993: 112 [type locality: East Malaysia, Sabah, 12 km NNE Ranau, Poring Hot Springs, Sg. Kipogoh, 06°03'N 116°42'E, 550 m; RMNH; ♂]. —Oláh and Johanson 2010a: 59 [distribution]. —Malicky 2010a: 51 [atlas; ♂].

Distribution. —Malaysia.

sivka Oláh, 2016: 121 [type locality: Indonesia, West Papua, Batanta Island, valley of Warai stream, 00°50'51.0", 130°35'14.0"; Collection Oláh; ♂].

Distribution. —Indonesia.

specana Wells, 2005: 390 [type locality: Australia, N Queensland, 18°57'S 146°10'E, Mt Spec State Forest, unnamed creek 'Confusion Creek', tributary to Paluma Reservoir, 905 m; NMV; ♂].

Distribution. —Australia.

spinicauda Kimmins, 1958a: 366 [type locality: [Zimbabwe], S. Rhodesia, Victoria Falls; NHMUK; ♂].

Distribution. —Zimbabwe.

spiralina Statzner, 1977: 401 [type locality: Zaire, Kivu Region, Kalengo stream 10 km west of Lake Kivu; ZMHB; ♂; ♀].

Distribution. —Congo.

stipa Wells, 1979a: 614 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek; WAM; ♂]. —Wells 1985b: 31 [larva; case]. —Neboiss 1986: 92 [atlas; ♂].

Distribution. —Australia.

straeleni Jacquemart, 1956: 1 [type locality: [Congo], Baie de Kabuno, Kirotische-Shasha, Lac Kivu; IRSNB; ♂; ♀]. —Kimmins 1957c: 15 [♂; distribution]. —Jacquemart 1957: 117 [distribution; ♂; larva]. —Johanson 1992: 118 [checklist]. —Wells and Andersen 1995: 145 [checklist]. —Guenda 1996: 243 [distribution].

Distribution. —Burkina Faso, Congo, Uganda.

styx Malicky, 2008a: 839 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 43 [atlas; ♂].

Distribution. —Indonesia.

submontana Mey, 1995: 195 [type locality: [Philippines], Mindoro, Paluan, Calawagan-Fluß; Collection Mey; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

subrhomba Zhou & Morse in Zhou et al. 2010: 37 [type locality: [China], Fujian Province, Jiu-qu-xi, 118°01'12"E, 27°27'00"N, 220 m; NAUJ; ♂]. —Yang et al. 2016: 476 [checklist].

Distribution. —China.

suchiara Oláh, 1989: 292 [type locality: Vietnam, Bac Thai Province, Phuluong, River Dongdat; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Oláh and Johanson 2010a: 59 [distribution]. —Malicky 2010a: 52 [atlas; ♂].

Distribution. —Laos, Vietnam.

suteri Wells, 1979a: 605 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek; WAM; ♂; ♀]. —Neboiss 1986: 88 [atlas; ♂]. —Wells 1990c: 125 [case; distribution]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

tabala Oláh, 2016: 122 [type locality: Indonesia, West Papua, Batanta Island, right side stream of Forum River, 0°52'22.7", 130°27'45.1"; Collection Oláh; ♂].

Distribution. —Indonesia.

talea Wells, 1984: 278 [type locality: [Papua] New Guinea, Wau, Hospital Creek, 1250 m; BPBM; ♂]. —Neboiss 1986: 90 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

taleban Malicky & Chantaramongkol, 2007: 1036 [type locality: Thailand, Kao Soi Dao NP, 13°06'N 102°10'E, 400 m; Collection Malicky; ♂]. —Malicky 2010a: 47 [atlas; ♂].

Distribution. —Thailand.

talumalaus Malicky & Chantaramongkol, 2007: 1041 [type locality: [Papua New Guinea], Bismarck-Archipel, Insel Mussau, Talumalaus; Collection Malicky; ♂]. —Malicky 2010b: 88 [checklist].

Distribution. —Papua New Guinea.

terpsichore Malicky & Chantaramongkol, 2007: 1036 [type locality: Thailand, Nakon Si Thamarat, Mantok Yong NP, Pliew WF, 8°29'N 99°45'E, 110 m; Collection Malicky; ♂]. —Zhou et al. 2010: 34 [distribution]. —Malicky 2010a: 49 [atlas; ♂]. —Yang et al. 2016: 476 [checklist]. —Malicky et al. 2018: 1322 [distribution].

Distribution. —China, Thailand.

thaleia Malicky & Chantaramongkol, 2007: 1035 [type locality: Thailand, Nam Cat Tien, 11°26'N 107°26'E, 200 m; Collection Malicky; ♂]. —Malicky 2010a: 46 [atlas; ♂].

Distribution. —Thailand.

thanatos Malicky & Chantaramongkol, 2007: 1034 [type locality: Thailand, Doi Inthanon NP, Siribhum WF, 1300 m; Collection Malicky; ♂]. —Malicky 2010a: 49 [atlas; ♂].

Distribution. —Thailand.

thariel Malicky & Graf, 2015: 31 [type locality: Sudan, Wadi Halfa; Collection Malicky; ♂]. —Englmaier et al. 2020: 10 [distribution].

Distribution. —Ethiopia, Sudan.

thaumas Malicky & Chantaramongkol, 2007: 1037 [type locality: Thailand, Tramot, 7°15'N 100°02'E, 100 m; Collection Malicky; ♂]. —Malicky 2010a: 47 [atlas; ♂].

Distribution. —Thailand.

theia Malicky, 2008a: 838 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 48 [atlas; ♂].

Distribution. —Indonesia.

thersites Malicky & Chantaramongkol, 2007: 1039 [type locality: Thailand, Kao Soi Dao NP, 13°06'N 102°10'E, 400 m; Collection Malicky; ♂]. —Malicky 2010a: 48 [atlas; ♂].

Distribution. —Thailand.

thistletoni Wells, 19891: 517 [type locality: Papua New Guinea, West Highlands Province, Peregai, 6°09'S 144°11'E; ANIC; ♂; ♀].

Distribution. —Papua New Guinea.

thyone Malicky & Chantaramongkol, 2007: 1037 [type locality: Thailand, Prov, Loei, Ban Phangam, Piangtin WF, 17°04'N 101°45'E, 700 m; Collection Malicky; ♂]. —Malicky 2010a: 49 [atlas; ♂].

Distribution. —Thailand.

tinggi Wells & Huisman, 2001: 212 [type locality: Sulawesi Tenggara, N slope of Gunung Watuwila, 1100 m, Sungai Lalonduwasi; RMNH; ♂].

Distribution. —Indonesia.

tobfona Oláh, 2012: 51 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Warmon Creek, 1. waterfall; Collection Oláh; ♂].

Distribution. —Indonesia.

tombak Wells & Malicky, 1997: 187 [type locality: [Indonesia] N Sumatra, “Holzweg 2”, 10 km NE Prapat, 1050 m asl, 2°44'N 98°57'E; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 46 [atlas; ♂].

Distribution. —Indonesia.

tomentosa Wells, 1990c: 121 [type locality: [Australia] Northern Territory, Kakadu National Park, Radon Springs, 12°45'S 132°55'E; NTM; ♂]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

tonjolana Wells, 1990b: 404 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Fog 19, NHMUK Plot A; NHMUK; ♂]. —Wells and Huisman 2001: 214 [distribution]. —Malicky et al. 2010: 163 [distribution].

Distribution. —Indonesia.

tonsai Malicky, Melnitsky, & Ivanov, 2019: 427 [type locality: Thailand, Phuket, Ton Sai waterfall, 08°01.694'N, 98°21.944'E, height 137 m; ZIN; ♂].

Distribution. —Thailand.

tortuosa Wells, 1979a: 612 [type locality: [Australia] Victoria, Genoa River near Wangarabell; NMV; ♂; ♀]. —Wells 1985b: 30 [larva, case]. —Neboiss 1986: 94 [atlas; ♂; ♀]. —Oláh and Johanson 2010a: 59 [distribution].

Distribution. —Australia.

tragetti Mosely, 1930b: 247 [type locality: England, Hampshire, lake at Aubridge Danes, Romsey, but also lists France, Ain, La Dombes, St. Paul-de-Varax; NHMUK; ♂]. —Martynov 1934: 124 [♂]. —Mosely 1939b: 279 [♂]. —Schmid 1947: 531 [distribution]. —Nybom 1960: 18 [checklist]. —Spuris 1962: 62 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —Malicky 1983b: 54, 55 [atlas; ♂; ♀]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 150 [♂]. —Nógrádi 1985: 129 [distribution; ♂; ♀]. —Reusch 1986: 139 [distribution]. —Nógrádi 1986: 139 [distribution]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Botosaneanu and Levanidova 1988: 174 [distribution]. —Oláh 1989: 288 [distribution]. —Spuris 1989: 17 [checklist]. —Xue et al. 1992: 353–356 [distribution]. —Nógrádi and Uherkovich 1994: 31 [distribution]. —Chvojka 1996: 131 [distribution]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Graf et al. 1998: 206 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Nógrádi and Uherkovich 1998: 338 [distribution]. —Malicky 1999c: 96 [distribution]. —Malicky 1999f: 31 [distribution]. —Uherkovich and Nógrádi 1999: 420 [distribution]. —Morse et al. 2001: 102 [distribution]. —Valle 2001: 64 [distribution]. —Uherkovich and Nógrádi 2001: 94 [distribution]. —Nógrádi and Uherkovich 2001: 297 [checklist]. —Arefina et al. 2002: 99 [distribution]. —Nógrádi and Uherkovich 2002: 130 [distribution]. —Gullefors 2002: 138 [checklist]. —Cianficconi et al. 2002: 146 [distribution]. —Gullefors 2003: 195 [distribution]. —Serafin 2003: 319 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 68, 69 [atlas]. —Lukas 2004: 685 [distribution]. —Weinzierl et al. 2005: 48 [distribution]. —Malicky 2005a: 66 [distribution]. —Hohmann 2005: 106 [checklist]. —Malicky 2005b: 545 [checklist]. —Sipahiler 2005: 397 [distribution]. —Yang et al. 2005: 458 [checklist]. —Komzák and Chvojka 2005: 65 [distribution]. —Wiggers et al. 2006: 54 [distribution]. —Gullefors 2006: 137 [distribution]. —Voigt et al. 2006: 73 [distribution]. —Waringer and Graf 2006: 356 [distribution]. —Robert 2007: 83 [checklist]. —Berlin and Thiele 2007: 48, 50 [distribution; checklist]. —Szczęsny and Godunko 2008: 15 [checklist]. —Gullefors 2008: 64 [checklist]. —Waringer and Graf 2008: 142 [distribution]. —Ujvárosi et al. 2008: 112 [checklist]. —Chvojka and Komzák 2008: 13 [distribution]. —Nozaki 2010: 22 [distribution]. —Zhou et al. 2010: 40 [checklist]. —Malicky 2010a: 52 [atlas; ♂]. —Cianficconi et al. 2011: 47 [distribution]. —Ivanov 2011: 195 [checklist]. —Ito 2013: 39 [♂; ♀; distribution]. —Lock and Zwaenepoel 2014: 232 [distribution]. —Mey 2014: 184, 187 [distribution]. —Yang et al. 2016: 476 [checklist]. —Tanida and Kuranishi 2016: 71 [checklist]. —Vshivkova et al. 2016: 79 [distribution]. —Vrućina et al. 2016: 113 [distribution]. —Potikha and Vshivkova 2016: 364 [distribution]. —Sipahiler 2016: 15 [checklist]. —Gullefors 2016: 155 [checklist]. —Küttner et al. 2016: 179 [distribution]. —Graf and Leitner 2016: 37 [distribution]. —Wallace 2016: 21, 23, 66 [conservation status]. —Kobayashi et al. 2017: 17 [distribution]. —Park et al. 2018: 104 [♂; ♀; distribution]. —Park and Kong 2020: 298 [checklist].

Distribution. —Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, England, Finland, France, Germany, Greece, Hungary, Italy, Japan, Korea, Latvia, Netherlands, Poland, Slovenia, Romania, Russia, Slovakia, Sweden, Switzerland, Turkey, Ukraine, Vietnam.

triacantha Mey, 2003b: 434 [type locality: Philippines, Luzon, Laguna, Pangil; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

trilineata Jacquemart, 1963a: 412 [type locality: [South Africa], Cape Prov., Upington, Orange River; IRSNB; ♂]. —Palmer 1996: 43 [distribution]. —Mey 2011: 345 [checklist].

Distribution. —South Africa.

trispinata Wells, 2005: 390 [type locality: Australia, N Queensland, 18°57'S 146°10'E, Mt Spec State Forest, Camp Creek, 760 m; NMV; ♂].

Distribution. —Australia.

triton Malicky, 2008a: 838 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 43 [atlas; ♂].

Distribution. —Indonesia.

tronoca Oláh & Johanson, 2010a: 59 [type locality: Vietnam, Lamdong Province, Baoloc, Duchma stream; Collection Oláh; ♂].

Distribution. —Vietnam.

tumoris Wells, 1984: 277 [type locality: [Papua] New Guinea, Mendi, 1497 m; ANIC; ♂]. —Neboiss 1986: 89 [atlas; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

tunjakkana Wells, 1990b: 400 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Site 6; NHMUK; ♂; ♀; larva; pupa; case]. —Wells and Huisman 2001: 214 [distribution].

Distribution. —Indonesia.

turrita Wells, 1979a: 600 [type locality: [Australia] Western Australia, Four Mile Creek, 20 km NE. Lake Argyle Tourist Village; WAM; ♂]. —Wells 1985b: 29 [larva; case]. —Neboiss 1986: 87 [atlas; ♂]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

tyche Malicky & Chantaramongkol, 2007: 1036 [type locality: Thailand, Tinggi Raja, 3°09'N 98°48'E, 300 m; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist; distribution]. —Malicky 2010a: 47 [atlas; ♂].

Distribution. —Indonesia, Thailand.

tyleri Wells, 1979a: 618 [type locality: [Australia] Western Australia, Mitchell Plateau, Camp Creek; WAM; ♂]. —Neboiss 1986: 94 [atlas; ♂]. —Wells 1990c: 123 [case; distribution]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia.

typhoeus Malicky & Chantaramongkol, 2007: 1036 [type locality: Thailand, Nam Mae Sa beim Sirikit Botanischen Garten, 12 km W Mae Rim, 18°54'N 98°52'E, 700 m; Collection Malicky; ♂]. —Malicky 2010a: 45 [atlas; ♂].

Distribution. —Thailand.

tyro Malicky & Chantaramongkol, 2007: 1032 [type locality: Thailand, Tung Salaeng NP, 16°49'N 100°57'E, 600 m; Collection Malicky; ♂]. —Malicky 2010a: 43 [atlas; ♂].

Distribution. —Thailand.

udawarama (Schmid, 1958b): 61 [type locality: [Sri Lanka], Ceylan, Lindula (C. P., 4100 ft) 3-III, belle rivière assez calme, à fond dallé, dans les plantations de thé; depository not designated; ♂; in *Baliostrichia*]. —Xue and Yang 1991: 22 [distribution]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist; distribution]. —Malicky and Chantaramongkol 2007: 1040 [♂; distribution]. —Zhou et al. 2010: 40 [checklist]. —Yang et al. 2016: 476 [checklist].

Distribution. —China, Sri Lanka.

† *umbra* Melnitsky & Ivanov, 2016: 283 [type locality: [Ukraine], Rovno Amber, Bartonian, Eocene; IZSK; ♂; ♀].

Distribution. —Rovno amber.

urania Malicky & Chantaramongkol, 2007: 1032 [type locality: Thailand, Prov. Lampang, Chaeson NP, 18°46'N 99°28'E, 500 m; Collection Malicky; ♂]. —Malicky 2010a: 50 [atlas; ♂].

Distribution. —Thailand.

urimica Wells, 1984: 279 [type locality: [Papua] New Guinea, D.P.I Urimo Station; BPBM; ♂; ♀]. —Neboiss 1986: 93 [atlas; ♂; ♀]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

vadalis Mey & de Moor, 2019: 142 [type locality: Namibia, Kunene River, Epupa Falls, 17°00'24"S, 13°14'52"E; ZMHB; ♂].

Distribution. —Namibia.

vakrata Oláh & Johanson, 2010a: 61 [type locality: Indonesia, Sumatra, Way Titias, Bukit Barisan Selatan NP, 950 m; Collection Oláh; ♂].

Distribution. —Indonesia.

velata Wells, 1983: 641 [type locality: Australia, Queensland, Upper Ross R., below weir; NMV; ♂; ♀]. —Wells 1985b: 30 [larva]. —Neboiss 1986: 88 [atlas; ♂; ♀]. —Wells 1990c: 125 [case; distribution]. —Wells et al. 2019: 33 [detection frequency].

Distribution. —Australia .

verbekei Jacquemart, 1957: 122 [type locality: [Congo], Lac Édouard, Mosenda; IRSNB; ♂]. —Guenda, 1996: 243 [distribution].

Distribution. —Burkina Faso, Congo.

vertumnus Malicky & Chantaramongkol, 2007: 1032 [type locality: Vietnam, Man Cat Tien NP, 11°26'N 107°26'E, 200 m; Collection Malicky; ♂]. —Malicky 2010a: 50 [atlas; ♂].

Distribution. —Vietnam.

waridora Oláh, 2013: 74 [type locality: Indonesia, Papua, Raja Ampat, Batanta Island, northern coast, Waridor river, 0.86492°S, 130.52206°E; Collection Oláh; ♂].

Distribution. —Indonesia.

warmona Oláh, 2012: 51 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Warmon Creek, 2. waterfall, 0°50'23.25"S 130°42'35.18"E; Collection Oláh; ♂]. —Oláh and Kovács 2018: 184 [distribution].

Distribution. —Indonesia.

wellsae Xue & Yang, 1990: 128 [type locality: [China] Longsheng, Guangxi; NAU]; ♂]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist]. —Malicky and Chantaramongkol 2007: 1037 [♂; distribution]. —Zhou et al. 2010: 40 [checklist]. —Malicky 2010a: 46 [atlas; ♂]. —Yang et al. 2016: 476 [checklist]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —China, Malaysia, Thailand.

yabbaca Wells, 1983: 642 [type locality: Australia, Queensland, Yabba Creek, 10 km W. Imbil; NMV; ♂; ♀]. —Neboiss 1986: 93 [atlas; ♂; ♀].

Distribution. —Australia.

yaowachon Malicky & Chantaramongkol, 2007: 1039 [type locality: Thailand, Kao Yai NP, Yaowachon campsite bei Kong Kao WF, 680 m; Collection Malicky; ♂]. —Malicky 2010a: 44 [atlas; ♂].

Distribution. —Thailand.

zonata (Neboiss, 1977): 41 [type locality: [Australia] Tasmania, St. Patricks River, Targa; NMV; ♂; ♀; in *Targatrichia*]. —Wells 1979a: 591 [♂; ♀; distribution; to *Orthotrichia*]. —Neboiss 1986: 85 [atlas; ♂; ♀]. —Neboiss 2002: 54 [checklist]. —*capa* Oláh & Johanson, 2010a: 42 [type locality: Australia, Tasmania, Wilds Rivers NP, Collingswood River, 100 m upstream bridge on A10, 42°09.718'S 145°55.602'E, 337 m; ANIC; ♂]. —Wells 2012: 67 [to synonymy].

Distribution. —Australia.

Genus *Saranganotrichia* Ulmer, 1951

Saranganotrichia Ulmer, 1951: 58, 83 [type species: *Saranganotrichia decussata* Ulmer, 1951, original designation]. —Marshall 1979: 216 [synonymized with *Ithytrichia* Eaton, 1873]. —Malicky 2009a: 16 [resurrected from synonymy].

Huayptila Malicky & Chantaramongkol, 2007: 1025 [type species: *Huayptila kaosoidao* Malicky & Chantaramongkol, 2007, original designation]. —Malicky 2009a: 16 [to synonymy].

Saranganotrichia consists of four species recorded from Thailand and Indonesia. The genus was established by Ulmer (1951) based largely on features of the wings, which are no longer considered reliable characters in Hydroptilidae. Based on similarities in the larvae and the cases, the genus was synonymized with *Ithytrichia* by Marshall (1979b), who also expressed doubts about the quality of Ulmer's original preparations of larval *Saranganotrichia*. The genus was later resurrected by Malicky (2009a), based on a re-examination of the larval material. The larval stage of *S. decussata* was described by Ulmer (1957).

chiangdao (Malicky & Chantaramongkol, 2007): 1026 [type locality: Thailand, Mae Ping beim Elephant Camp 12 km S von Chiang Dao, 19°16'N 98°58'E, 360 m; Collection Malicky; ♂; in *Huayptila*]. —Malicky 2010a: 39 [atlas; ♂].

Distribution. —Thailand.

decussata Ulmer, 1951: 84 [type locality: [Indonesia], Java, Sarangan, 1450 m; ZMUH; ♂; in *Javanotrichia*]. —Malicky 2009a: 16 [♂]. —Malicky 2010a: 39 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

kaosoidao (Malicky & Chantaramongkol, 2007): 1026 [type locality: Thailand, Kao Soi Dao NP, 13°06'N 102°10'E, 400 m; Collection Malicky; ♂; in *Huayptila*]. —Malicky 2010a: 39 [atlas; ♂].

Distribution. —Thailand.

oldalra Oláh, 2012: 49 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Site A, 0°50'04.03"S 130°42'54.14: E; Collection Oláh; ♂]. —Oláh and Kovács 2018: 179 [distribution].

Distribution. —Indonesia.

Subfamily STACTOBIINAE Botosaneanu, 1956

Stactobiinae Botosaneanu, 1956: 382 [type genus: *Stactobia* McLachlan, 1880]. —Marshall 1979b: 163 [reviewed as tribe Stactobiini]. —Wells 1990a: 817, 820 [phylogeny; key to males and fully mature, cased larvae of genera in New Guinea]. —Bowles et al. 1999: 43 [larval morphology; systematics]. —Harri et al. 2002b: 58 [key to New World genera]. —Malicky and Chantaramongkol 2007: 1042 [discussion of taxonomic limits].

The subfamily Stactobiinae currently consists of 12 described genera with a Holarctic and Oriental distribution, although generic diversity may be greatest in Southeast Asia (Wells 1990a). The subfamily was originally established for the genus *Stactobia* and other closely related genera, which at the time were not named (Botosaneanu 1956). Most likely, Botosaneanu intended to include the genera *Stactobiella*, *Plethus*, *Plethotrichia*, and *Lamonganotrichia* (Marshall 1979b). Ulmer (1957) and Schmid (1959a) provided additional comments regarding the relationships between these and other genera (*Chrysotrichia*, *Macrostactobia*, *Madioxyethira*, *Parastactobia*, *Pseudoxyethira*). Flint (1970) subsequently placed *Plethus* and *Lamonganotrichia* in Stactobiinae, based on morphological features of the larvae and their cases.

Subsequent works have re-evaluated the status and composition of Stactobiinae. Marshall (1979b) concluded that incorrect interpretations of the spur formula, presence of ocelli, and features of the wing venation had led to errors in original generic diagnoses. The grouping that she presented was instead based on features of the male and female genitalia, head and thoracic structures, and amended ocellar counts and spur formulae. Wells (1990a) also re-evaluated Stactobiinae and remarked on the difficulty of maintaining the group when she had to modify and expand Marshall's (1979b) description of the subfamily in order to account for variations in the spur formula

and wing venation. In this work, Wells provided a re-description of the subfamily, a modification based on Marshall's work, that included features of the adult, pupa, and mature larva. Bowles et al. (1999) agreed that uniting Stactobiinae was problematic and stated that several of the New World genera in particular shared many similar features with members of Leucotrichiinae. Based on a suite of larval characters they considered to be derived for Leucotrichiinae, Bowles and coauthors transferred several genera to Leucotrichiinae. These authors stated that they could not find any uniquely derived larval characters to unite Stactobiinae. Malicky and Chantaramongkol (2007) briefly commented on the taxonomic limits of Stactobiinae and agreed that the subfamily is difficult and that generic limits are often ambiguous. They did not offer any characters that could be used to diagnose or unite the subfamily. Larval descriptions are available for all genera except *Maetalaiptila*, *Orinocotrichia*, and *Tizatetrichia*.

Genus *Bredinia* Flint, 1968

Bredinia Flint, 1968b: 50 [type species: *Bredinia dominicensis* Flint, 1968b, original designation]. —Marshall 1979b: 170 [generic review]. —Angrisano 2002: 398 [♀, larva]. —Harris et al. 2002a: 14 [revision].

Seventeen species currently represent the genus *Bredinia*, which occurs in the Lesser Antilles and is restricted in distribution to the Neotropical faunal region. Flint (1968b) considered *Bredinia* to have affinities with several different genera placed outside of Stactobiinae (*Alisotrichia*, *Mayatrichia*, *Neotrichia*), but stated that similarities in the thoracic nota and the male genitalia made the genus most similar to *Stactobiella* (1968).

alza Harris, Holzenthal, & Flint, 2002: 35 [type locality: Paraguay, Concepción, Concepción; NMNH; ♂]. —Angrisano and Sganga 2007: 28 [♂; larva; distribution].

Distribution. —Argentina, Paraguay.

appendiculata Flint & Sykora, 1993: 56 [type locality: Grenada, Parish St. Andrews, Balthazar Estate; FSCA; ♂]. —Flint and Sykora, 1993: 49 [checklist]. —Botosaneanu 2002b: 82 [checklist]. —Harris et al. 2002a: 22 [♂; ♀; re-description; distribution].

Distribution. —Grenada, Peru, Venezuela.

costaricensis (Flint, 1967b): 13 [type locality: Costa Rica, La Lola near Martina; NMNH; ♂; in *Neotrichia*]. —Holzenthal 1988: 62 [distribution]. —Flint et al. 1999b: 76 [to *Bredinia*]. —Harris et al. 2002a: 24 [♂; ♀; re-description; distribution]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Panama.

davenporti Harris, Holzenthal, & Flint, 2002: 24 [type locality: Peru, Loreto, Río Sucusari at Explornapo Camp; NMNH; ♂].

Distribution. —Peru.

dominicensis Flint, 1968a: 51 [type locality: Dominica, Hodges River mouth, swamp forest; NMNH; ♂; ♀]. —Flint and Sykora 1993: 49 [checklist]. —Flint 1996b: 90 [distribution]. —Botosaneanu 2002b: 82 [checklist]. —Harris et al. 2002a: 15 [♂; ♀; re-description; distribution]. —Botosaneanu and Thomas 2005: 38 [distribution]. —Armitage et al. 2015a: 6 [checklist]. —Ríos-Touma et al. 2017: 9 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Dominica, Ecuador, Martinique, Panama, Trinidad.

dudosa Bueno-Soria & Barba-Álvarez, 2018: 363 [type locality: Mexico, Chiapas, Reserva de la Biósfera Montes azules, Est. Biol. Chajul, Arroyo José, 16°06'50.0"N, 90°56'03.3"W, 150 m asl; CNIN; ♂].

Distribution. —Mexico.

emarginata Harris, Holzenthal, & Flint, 2002: 37 [type locality: Costa Rica, Alajuela, Río Pizote, ca 5 km N Dos Ríos, 10.948°N 85.291°W; NMNH; ♂]. —Armitage et al. 2016: 6 [distribution]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Costa Rica, Panama.

espinosa Harris, Holzenthal, & Flint, 2002: 20 [type locality: Ecuador, Los Ríos, Quevedo (56 km N), Río Palenque Biological Station; NMNH; ♂; ♀]. —Paprocki et al. 2004: 11 [checklist]. —Nogueira and Cabette 2011: 351 [distribution]. —Oláh and Johanson 2011: 248 [distribution]. —Paprocki and França 2014: 42 [checklist]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Brazil, Ecuador, French Guiana, Venezuela.

guanacasteca Harris, Holzenthal, & Flint, 2002: 17 [type locality: Costa Rica, Guanacaste, Río Tempisquito, ca 3 km S route 1, 10.790°N 85.552°W, 75 m; NMNH; ♂].

Distribution. —Costa Rica.

manabiensis Harris, Holzenthal, & Flint, 2002: 27 [type locality: Ecuador, Manabi, 29 km W Santo Domingo, Rancho Ronald; NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

mexicana Harris, Holzenthal, & Flint, 2002: 35 [type locality: Mexico, Tamaulipas, Río Frio at La Poza Azul near Gómez Farias; NMNH; ♂].

Distribution. —Mexico.

pilcopata Harris, Holzenthal, & Flint, 2002: 32 [type locality: Peru, Cuzco, Pilcopata, 600 m; NMNH; ♂]. —Oláh and Johanson 2011: 248 [distribution].

Distribution. —Peru.

selva Harris, Holzenthal, & Flint, 2002: 19 [type locality: Costa Rica, Heredia, Estación Biológica La Selva; NMNH; ♂].

Distribution. —Costa Rica.

spangleri Harris, Holzenthal, & Flint, 2002: 34 [type locality: Ecuador, Pastaza, Puyo (16 km W); NMNH; ♂]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador.

sucrensis Harris, Holzenthal, & Flint, 2002: 37 [type locality: Venezuela, Sucre, Parque Nacional Peninsula de Paria, Uquire, Río La Viuda, 10°42.830'N 61°57.661'W, 15 m; NMNH; ♂; ♀]. —Armitage et al. 2018: 5 [distribution].

Distribution. —Panama, Venezuela.

venezuelensis Harris, Holzenthal, & Flint, 2002: 29 [type locality: Venezuela, Zulia, Perija El Tucuco, Mission El Tucuco, Río El Tucuco, 11 km from church; NMNH; ♂; ♀]. —Oláh and Johanson 2011: 248 [distribution]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Ecuador, Peru, Venezuela.

zulia Harris, Holzenthal, & Flint, 2002: 39 [type locality: Venezuela, Zulia, El Tucuco, Sierra de Perija; NMNH; ♂].

Distribution. —Venezuela.

Genus *Catoxyethira* Ulmer, 1912

Catoxyethira Ulmer, 1912b: 82 [type species: *Catoxyethira fasciata* Ulmer, 1912b, monotypic]. —Marshall 1979b: 171 [generic review]. —Gibon 1985: 154 [key to Côte d'Ivoire species]. —Gibon 1993: 200 [key to species groups]. —Wells and Andersen 1996: 87 [key to Tanzanian species].

Sperotrichia Marlier, 1978: 294 [type species: *Sperotrichia mali* Marlier, 1978, original designation]. —Marshall 1979b: 171 [to synonymy].

Parastactobia Schmid, 1958b: 48 [type species: *Parastactobia talakalahena* Schmid, 1958b, original designation]. —Marshall 1979b: 173 [generic review]. —Malicky and Chantaramongkol 2007: 1053 [re-description]. —Oláh and Johanson 2010a: 62 [to synonymy].

The genus *Catoxyethira* consists of 68 species occurring mostly in Africa. A single species, *C. prima*, has been recorded from the Philippines and Southeast Asia (Mey 2003b). The larva and case of an unidentified species, later placed in *Catoxyethira*, were described by Ulmer (1912b). Several structural similarities occurring in the spur formula and male genitalia are present in adults of *Catoxyethira* and *Stactobiella*, as noted by Morse (1974). Marshall (1979b) also concluded that the genus belongs in the *Stactobiella* group of Stactobiinae, based on features of the adult head and thorax.

abongae Gibon, 1993: 201 [type locality: [Cameroon], sur la Ngoué (bassin dy Nyong) à Pouma; MNHN; ♂].

Distribution. —Cameroon.

ajsae Oláh & Johanson, 2010a: 62 [type locality: Indonesia, Sumatra, Way Titias, Bukit Barisan Selatan NP, 950 m; Collection Oláh; ♂].

Distribution. —Indonesia.

apicospinosa Wells & Andersen, 1995: 151 [type locality: Tanzania, Tanga region, West Usambara Mts, Dule, Bumbuli River, 1220 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

badyi Gibon, 1991: 129 [type locality: [Guinea], au piège lumineux sur le Konkouré à Bady; MNHN; ♂].

Distribution. —Guinea.

bilongae Gibon, 1993: 202 [type locality: [Cameroon], sur le Méfou (bassin dy Nyong) à l'intersection avec la route Yaoundé/Douala; MNHN; ♂].

Distribution. —Cameroon.

bombolensis Wells & Andersen, 1995: 149 [type locality: Tanzania, Tanga region, East Usambara Mts, Bombole, 830 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

botosaneanui Guenda, 1997: 221 [type locality: [Burkian Faso], zone des sources du Mouhoun à Fon; UOBF; ♂].

Distribution. —Burkina Faso.

catichae Gibon & Ranaivoharindriaka, 1995: 113 [type locality: [Madagascar], sur la Mananara (bassin du Mandrare) à Betanimena près d'Amboasary atsimo; MNHN; ♂].

Distribution. —Madagascar.

cavallyi Gibon, 1985: 153 [type locality: Côte-D'Ivoire, affluent du Cavally à Wa; MNHN; ♂]. —Gibon, 1991: 128 [♂]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. — Côte d'Ivoire, Ghana.

ciliata Wells & Andersen, 1995: 155 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 3, 1720 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

crenulata Wells & Andersen, 1995: 153 [type locality: Tanzania, Morogoro region, Morogoro, Sokoine University of Agriculture, 550 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

crinita Wells & Andersen, 1995: 154 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 5, 1650 m a.s.l.; ZMUB; ♂]. —Wells and Andersen 1996: 87 [distribution].

Distribution. —Tanzania.

darrieti Gibon, 1993: 204 [type locality: [Cameroon], sur l'Ombe River à l'intersection avec la route Douala/Limbe; MNHN; ♂].

Distribution. —Cameroon.

decampeii Gibon in Gibon and Ranaivoharindriaka 1995: 109 [type locality: [Madagascar], sur la Namorona, à 11 km en aval de Ranomafana, province de Fianarantsoa; MNHN; ♂].

Distribution. —Madagascar.

disymetrica disymetrica Gibon, 1991: 127 [type locality: [Guinea], au piège lumineux sur le Niandan (bassin du Niger) à Bambaya (région de Kissidougou); MNHN; ♂].

Distribution. —Guinea.

disymetrica yaoundeensis Gibon, 1993: 202 [type locality: [Cameroon], sur l'Assamba (bassin de la Sanaga) à Nkomeyo (région de Yaoundé); MNHN; ♂].

Distribution. —Cameroon.

djenebae Guenda, 1997: 221 [type locality: [Burkian Faso], zone des sources du Mouhoun à Fon; UOBF; ♂].

Distribution. —Burkina Faso.

duatali Wells & Malicky, 1997: 179 [type locality: [Indonesia] East Java, Meru Betiri, stream in savannah; ANIC; ♂; in *Chrysotrichia*]. —Malicky and Chantaramongkol 2007: 1054 [to *Parastactobia*]. —Oláh and Johanson 2010a: 62 [to *Catoxyethira*]. —Malicky 2010a: 59 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution; as *Parastactobia*]. —Malicky et al. 2016: 92 [distribution; as *Parastactobia*].

Distribution. —Indonesia.

elongata Wells & Andersen, 1995: 153 [type locality: Tanzania, Morogoro region, Kimboza, Ruvu River, 150 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

elouardi Gibon, 1987b: 115 [type locality: Guinea, small affluent of the Milo, near Konsankoro on the track to Beyla; MNHN; ♂].

Distribution. —Guinea.

fasciata Ulmer, 1912b: 82 [type locality: [Democratic Republic of Congo], Kongo, Kinchassa; IRSNB; ♂].

Distribution. —Democratic Republic of Congo.

fonensis Guenda, 1997: 219 [type locality: [Burkina Faso], zone des sources du Mouhoun près du petit village de Fon, à 500 m d'altitude sur l'axe Bobo-Dioulasso-Orodata; UOBF; ♂].

Distribution. —Burkina Faso.

fonkouae Gibon, 1993: 205 [type locality: [Cameroon], sur l'Afamba à Oboua (région de Yaoundé; MNHN; ♂].

Distribution. —Cameroon.

formosae (Iwata, 1928): 343 [type locality: [China, Taiwan], Urai, Formosa; depository not designated; larva; in *Hydroptila*]. —Yang et al. 2016: 475 [checklist; in *Catoxyethira*].

Distribution. —China.

foumbani Gibon, 1993: 203 [type locality: [Cameroon], sur le Manem (affluent de Mbam, bassin de la Sanaga) à Foumban; MNHN; ♂].

Distribution. —Cameroon.

gariensis Mey, 2011: 349 [type locality: Namibia, Noordoewer, Orange River at Felix Unite; ZMHB; ♂].

Distribution. —Namibia.

giboni Wells & Andersen, 1996: 87 [type locality: Tanzania, Uluguru Mts, Morogoro River, 600 m; ZMUC; ♂].

Distribution. —Tanzania.

gimouae Gibon, 1993: 205 [type locality: [Cameroon], sur la Ngoué (bassin dy Nyong) à Pouma; MNHN; ♂].

Distribution. —Cameroon.

giudicellii Guenda, 1997: 223 [type locality: [Burkin Faso], zone des sources du Mouhoun, près du village de Kourinion; UOBF; ♂].

Distribution. —Burkina Faso.

graboensis Gibon, 1985: 154 [type locality: Côte-D'Ivoire, affluent du Cavally à quelques kilomètres au nord de Grabo; MNHN; ♂]. —Gibon 1987b: 118 [distribution]. —Gibon et al. 1994: 109 [distribution].

Distribution. —Burkina Faso, Côte d'Ivoire, Guinea.

gura Malicky, 2020: 510 [type locality: [Kenya], Kenia, Gura River, power plant, 0°30'S, 36°53'E; collection Malicky; ♂].

Distribution. —Kenya.

hougardi Gibon, 1985: 153 [type locality: Côte-D'Ivoire, affluent du Cavally à Wa; MNHN; ♂]. —Gibon 1987b: 118 [distribution]. —Gibon 1993: 205 [distribution].

Distribution. —Cameroon, Côte d'Ivoire, Guinea.

iloui Gibon, 1993: 203 [type locality: [Cameroon], sur le Mayo Ilou (bassin de la Bénoué) à Finyolé (région de Poli); MNHN; ♂].

Distribution. —Cameroon.

improcera Statzner, 1977: 398 [type locality: Zaire, Kivu Region, Kalengo stream 10 km west of Lake Kivu; ZMHB; ♂; ♀].

Distribution. —Congo.

incompta Wells & Andersen, 1995: 149 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 4, 1680 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

khakaeng (Malicky & Chantaramongkol, 2007): 1054 [type locality: Thailand, Huai Kha Kaeng WS, headquarters, 15°36'N 99°19'E, 300 m; ♂; in *Parastactobia*]. —Oláh and Johanson 2010a: 64 [distribution]. —Malicky 2010a: 59 [atlas; ♂]. —Malicky et al. 2014c: 34 [checklist].

Distribution. —Cambodia, Laos, Thailand.

kourinioni Guenda, 1997: 223 [type locality: [Burkin Faso], zone des sources du Mouhoun, près du village de Kourinion; UOBF; ♂].

Distribution. —Burkina Faso.

kumiskucinga (Wells, 1990b): 373 [type locality: [Indonesia] Sulawesi Utara, Motolanga R., Doloduo-Malibagu road; NMV; ♂; in *Parastactobia*].

Distribution. —Indonesia.

kunenica Mey & de Moor, 2019: 141 [type locality: Namibia, Kunene River, Swartbooisdrif, Kunene River Lodge, 17°20'50"S, 13°52'56"E; ZMHB; ♂]. —Wells and de Moor 2020: 497 [distribution].

Distribution. —Angola, Namibia.

lanceolata Wells & Andersen, 1995: 151 [type locality: Tanzania, Tanga region, East Usambara Mts, Mlesha, 800 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

laurenceae Gibon, 1993: 201 [type locality: [Cameroon], sur l'Ombe River au niveau de la route Douala/Limbe; MNHN; ♂].

Distribution. —Cameroon.

lelouma Gibon, 1991: 127 [type locality: [Guinea], au piège lumineux sur un petit affluent du Tominé (bassin du Rio Corubal) dans la région de Télimélé; MNHN; ♂]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Ghana, Guinea.

leynarti Gibon, 1987b: 117 [type locality: Guinea, on the Niger, upstream of the Kissidougou-Faranah road; MNHN; ♂]. —Gibon 1993: 203 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Cameroon, Ghana, Guinea.

lohoueae Gibon, 1993: 204 [type locality: [Cameroon], sur la Ngoué (bassin du Nyong) à Pouma; MNHN; ♂].

Distribution. —Cameroon.

mali (Marlier, 1978): 295 [type locality: Mali, pont de Kouoro; MRAC; ♂; in *Sperotrichia*]. —Gibon, 1985: 151 [distribution]. —Gibon 1987b: 118 [distribution]. —Gibon 1993: 203 [distribution]. —Gion and Ranaivoharindriaka 1995: 113 [♂; distribution]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Cameroon, Côte d'Ivoire, Ghana, Guinea, Madagascar, Mali.

margemiring (Wells & Malicky, 1997): 178 [type locality: N Sumatra, Huta Padang, 02°45'N 99°14'E; Collection Malicky; ♂; in *Chrysotrichia*]. —Malicky and Chantaramongkol 2007: 1054 [to *Parastactobia*]. —Malicky 2007a: 177 [checklist; in *Parastactobia*]. —Oláh and Johanson 2010a: 62 [to *Catoxyethira*]. —Malicky 2010a: 59 [atlas; ♂].

Distribution. —Indonesia.

mouensis Gibon, 1993: 206 [type locality: [Cameroon], sur la Mou à Nkounden (région de Foumban); MNHN; ♂].

Distribution. —Cameroon.

namoroneae Gibon, 1995 in Gibon and Ranaivoharindriaka 1995: 111 [type locality: [Madagascar], sur la Namorona, à 11 km en aval de Ranomafana, province de Fianarantsoa; MNHN; ♂].

Distribution. —Madagascar.

nzoi Gibon, 1985: 154 [type locality: Côte-D'Ivoire, sur le Nzo au niveau de la piste Man/Danané; MNHN; ♂]. —Gibon 1987b: 118 [distribution]. —Gibon 1993: 202 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Cameroon, Côte d'Ivoire, Ghana, Guinea.

ocellata Statzner, 1977: 396 [type locality: [Congo], Zaire, Kivu Region, Kalengo stream 10 km west of Lake Kivu; ZMHB; ♂; ♀]. —Wells and Andersen 1995: 151 [distribution].

Distribution. —Congo, Tanzania.

ombeensis Gibon, 1993: 205 [type locality: [Cameroon], sur l'Ombe River à l'intersection avec la route Douala/Limbe; MNHN; ♂].

Distribution. —Cameroon.

pinheyi Kimmins, 1958a: 365 [type locality: [Zimbabwe], S. Rhodesia, Victoria Falls; NMZ; ♂]. —Gibon 1985: 153 [distribution]. —Johanson 1992: 118 [checklist]. —Gibon 1993: 204 [distribution]. —Wells and Andersen 1995: 145 [checklist]. —Guenda 1997: 219 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. —Burkina Faso, Cameroon, Côte d'Ivoire, Ghana, Zimbabwe.

pougoueae Gibon, 1993: 205 [type locality: [Cameroon], sur un petit affluent forestier de la Sanaga situé entre Sakbayémé et Song-Loulou; MNHN; ♂].

Distribution. —Cameroon.

prima Mey, 2003b: 428 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

razanamiadanae Gibon in Gibon and Ranaivoharindriaka 1995: 107 [type locality: [Madagascar], sur la Namorona, à 11 km en aval de Ranomafana, province de Fianarantsoa; MNHN; ♂].

Distribution. —Madagascar.

robisoni Gibon & Ranaivoharindriaka, 1995: 111 [type locality: [Madagascar], sur la Namorona, à 11 km en aval de Ranomafana, province de Fianarantsoa; MNHN; ♂].

Distribution. —Madagascar.

ruvuensis Wells & Andersen, 1995: 151 [type locality: Tanzania, Morogoro Region, Kimboza, Ruvu River, 150 m a.s.l.; ZMUB; ♂].

Distribution. —Tanzania.

spinifera Gibon, 1985: 154 [type locality: Côte-D'Ivoire, affluent du Cavally à Wa; MNHN; ♂]. —Gibon 1987b: 118 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. — Côte d'Ivoire, Ghana, Guinea.

stolzei Wells & Andersen, 1996: 87 [type locality: Tanzania, Uzungwa Mts, Mwanihana Forest, Sanje River, 300–400 m; ZMUC; ♂].

Distribution. —Tanzania.

taengdoia (Malicky & Chantaramongkol, 2007): 1054 [type locality: Thailand, Mae Ping beim Royal Ping Resort, 9 km N Mae Taeng, 19°12'N 98°58'E, 350 m; ♂; in *Parastactobia*]. —Malicky 2010a: 59 [atlas; ♂].

Distribution. —Thailand.

taiensis Gibon, 1985: 151 [type locality: Côte-D'Ivoire, Cavally riv. à Taï; MNHN; ♂]. —Gibon 1987b: 118 [distribution]. —Gibon 1993: 202 [distribution].

Distribution. —Cameroon, Côte d'Ivoire, Guinea.

talakalahena (Schmid, 1958b): 48 [type locality: [Sri Lanka], Ceylan, Gurudeniya (C. P., 1500 ft) 15-I, Talatu Oya, petite rivière aux eaux claires et agitées, dans forêt clairsemée; depository not designated; ♂; in *Parastactobia*]. —Malicky and Chantaramongkol 2007: 1099 [♂].

Distribution. —Sri Lanka.

tonyeae Gibon, 1993: 201 [type locality: [Cameroon], sur le Ouem (bassin de la Sanaga) à Song-Loulou; MNHN; ♂].

Distribution. —Cameroon.

vanandeli Guenda, 1997: 222 [type locality: [Burkin Faso], zone des sources du Mouhoun, à Kourinion; UOBF; ♂].

Distribution. —Burkina Faso.

vedonga Oláh, 1989: 266 [type locality: Vietnam, Cucphuong, 400 m a.s.l.; HNHN; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 56 [atlas; ♂].

Distribution. —Vietnam.

veruta veruta Morse, 1974: 335 [type locality: [Zimbabwe], Kariba, Southern Rhodesia, 636 m; FSCA; ♂]. —Gibon 1993: 202 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution]. —de Moor et al. 2000: 112 [distribution]. —Mey and de Moor 2019: 137, 139 [checklist; distribution].

Distribution. —Cameroon, Ghana, Zimbabwe.

veruta septentrionalis Gibon, 1985: 151 [type locality: Côte-D’Ivoire, Cavally riv. à Taï; MNHN; ♂]. —Gibon 1987b: 118 [distribution]. —Kjærandsen and Andersen 1997: 244 [distribution].

Distribution. — Côte d’Ivoire, Ghana, Guinea.

wouafondayoae Gibon, 1993: 203 [type locality: [Cameroon], sur le Noun (bassin de la Sanaga) à quelques kilomètres en amont de Bafia; MNHN; ♂].

Distribution. —Cameroon.

Genus *Chrysotrichia* Schmid, 1958

Chrysotrichia Schmid, 1958b: 54 [type species: *Chrysotrichia hatnagola* Schmid, 1958b, original designation]. —Marshall 1979b: 170 [generic review]. —Wells 1990b: 367 [larva; key to North Sulawesi species]. —Wells 1990a: 835 [key to species of New Guinea].

Chrysotrichia currently consists of 70 species, occurring in south and Southeast Asia. Schmid (1958b) concluded that the genus is most closely related to *Plethus*, due to similarities between the male genitalia, while Marshall (1979b) stated that it is also very similar to the *ulmeri* group of *Stactobiella*, based on features of the adult head and thorax and the male genitalia. The final instar larva of *C. berduri* was described by Wells (1990b).

angkup Wells & Huisman, 1993: 95 [type locality: West Malaysia, Kepong, Forest Research Institute of Malaya, on falls; NTM; ♂]. —Malicky 2010a: 68 [atlas; ♂].

Distribution. —Malaysia.

aningalan Wells & Mey, 2002: 123 [type locality: [Philippines] Panay, San Reminigio, Aningalan; ZMHB; ♂]. —Malicky 2013: 42 [possible senior synonym to *C. atugan*].

Distribution. —Philippines.

aranuwa Schmid, 1958b: 57 [type locality: [Sri Lanka], Ceylan, Ambagaswewa (N. C. P., 400 ft) 22-III, petite rivière assez agitée, à dalles rocheuses et bancs de sable, dans la forêt; depository not designated; ♂].

Distribution. —Sri Lanka.

arapela Wells, 1990a: 837 [type locality: Papua New Guinea, Central Province, stream in Kanosia Rubber Plantation, on Port Moresby-Bereina road; ANIC; ♂; ♀]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

armiger Mey, 2003b: 430 [type locality: Philippines, Leyte, Baybay, Mt. Panasugan; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

atugan Wells & Mey, 2002: 121 [type locality: [Philippines] Mindano, Atugan River, Bukidnon, 1800 m; BPBM; ♂]. —Malicky 2013: 42 [possible junior synonym to *C. aningalan*].

Distribution. —Philippines.

australis Wells, 1990c: 108 [type locality: NE Queensland, Yuccabine Creek; NMV; ♂].

Distribution. —Australia.

bachma Murray-Stoker & Morse in Murray-Stoker et al. 2020: 100 [type locality: [Vietnam], Bach Mã National Park, Thừa Thiên Huế Province, tributary to Pheasant Falls (tributary to Truoi River), 16.2287°N, 107.8486°E, 159 m; VNMN; ♂].

Distribution. —Vietnam.

badhami Schmid, 1960: 91 [type locality: [Pakistan] Penjab, Hassan Abdal; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Lonsdale 2020: 32 [holotype depository].

Distribution. —Pakistan.

barbalis Mey, 2003b: 430 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay, small stream to the Agos River; ZMHB, to be transferred to either MPMP or UPLB; ♂]. —Mey and Freitag 2020: 57 [distribution].

Distribution. —Philippines.

barisan Oláh & Johanson, 2010: 64 [type locality: Indonesia, Sumatra, Way Titias, Bukit Barisan Selatan NP, 950 m; Collection Oláh; ♂].

Distribution. —Indonesia.

berduri Wells, 1990b: 367 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Tumpah R., 1 km above Toraut R. junction; NMV; ♂; ♀; larva; case; pupa]. —Malicky et al. 2011: 162 [distribution].

Distribution. —Indonesia.

bintik Wells & Huisman, 1993: 94 [type locality: East Malaysia, Sabah, Long Pa Sia, confluence Sg. Pa Sia - St. Matang, 04°24'N 115°43'E, 1000 m; RMNH; ♂]. —Malicky 2010a: 67 [atlas; ♂].

Distribution. —Malaysia.

choliona Oláh, 1989: 264 [type locality: Vietnam, Son La Province, Moc Chau; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 68 [atlas; ♂].

Distribution. —Vietnam.

coodei Wells & Huisman, 1993: [type locality: Brunei, Sg. Temburong, 140 m; RMNH; ♂]. —Malicky 2010a: 67 [atlas; ♂].

Distribution. —Brunei.

distorta Wells & Mey, 2002: 123 [type locality: [Philippines] Panay, Culasi, San Vicente, 400 m; ZMHB; ♂].

Distribution. —Philippines.

dotalugola Schmid, 1958b: 57 [type locality: [Sri Lanka], Ceylan, Kitulgala (Sab., 750 ft) 2-III, Kelani Ganga, belle rivière coulant dans une vallée étroite et boisée, à la sortie des montagnes; depository not designated; ♂].

Distribution. —Sri Lanka.

echna Oláh & Johanson, 2010: 66 [type locality: Vietnam, Lamdong Province, Baoloc, River Da Nga; Collection Oláh; ♂].

Distribution. —Vietnam.

elongata Wells & Malicky, 1997: 181 [type locality: [Indonesia] Sumatra, Huta Padang; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 65 [atlas; ♂].

Distribution. —Indonesia.

gajah Wells & Huisman, 1993: 96 [type locality: East Malaysia, Sabah, Tenom, Tenom Agricultural Research Station; NTM; ♂]. —Malicky 2010a: 65 [atlas; ♂].

Distribution. —Malaysia.

ganjil Wells & Huisman, 1993: 97 [type locality: West Malaysia, Genting Highlands, Gombak, tributary of Sg. Gombak above University of Malaya field station; NTM; ♂; case]. —Malicky and Chantaramongkol 2007: 1049 [♂; distribution]. —Malicky 2010a: 70 [atlas; ♂]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Malaysia, Thailand.

hacha Oláh & Johanson, 2010: 67 [type locality: Vietnam, Lamdong Province, Baoloc, River Da Nga; Collection Oláh; ♂].

Distribution. —Vietnam.

hailana Oláh & Johanson, 2010: 69 [type locality: Vietnam, Lamdong Province, Baoloc, Loch Chau stream; Collection Oláh; ♂].

Distribution. —Vietnam.

hapitigola Schmid, 1958b: 57 [type locality: [Sri Lanka], Ceylan, Carney (Sab., 900 ft) 1-II, Balawane Oya, rivière de taille moyenne, torrentueuse, coulant sur de gros rochers moussus, à la sortie des montagnes; depository not designated; ♂].

Distribution. —Sri Lanka.

hatnagola Schmid, 1958b: 56 [type locality: [Sri Lanka], Ceylan, Konakalagala (C. P., 1700 ft) 17-I, Ping Oya, même aspect qu'à Ambatenna; depository not designated; ♂].

Distribution. —Sri Lanka.

hermani Wells & Huisman, 1993: 98 [type locality: East Malaysia, Sabah, Long Pa Sia, confluence Sg. Ritan, Sg. Rurun, 1040 m; RMNH; ♂]. —Malicky 2010a: 65 [atlas; ♂].

Distribution. —Malaysia.

borgos Oláh, 2013: 75 [type locality: Indonesia, Papua, Raja Ampat, Batanta Island, northern coast, Warmon stream, below first waterfall, 0.83570°S, 130.71400°E; Collection Oláh; ♂].

Distribution. —Indonesia.

hutapadangensis Wells & Malicky, 1997: 180 [type locality: [Indonesia] N Sumatra, Huta Padang; Collection Malicky; ♂]. —Malicky and Chantaramongkol 2007: 1051 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 65 [atlas; ♂]. —Oláh and Johanson 2010: 69 [distribution].

Distribution. —Indonesia, Laos, Thailand.

iomara Wells, 1990a: 838 [type locality: Papua New Guinea, Central Province, Iomari Creek on Port Moresby-Bereina road; ANIC; ♂; ♀; case]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

laoana Oláh & Johanson, 2010: 70 [type locality: Laos, Vientiane Province, Phamom stream, 125 m upstream Phahom Village, 363 m; NHRS; ♂].

Distribution. —Laos.

likliklang Wells, 1990a: 839 [type locality: Papua New Guinea, Central Province, creek in Kanosia Rubber Plantation on Port Moresby-Bereina road; ANIC; ♂; ♀]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

limacabanga Wells, 1990b: 371 [type locality: [Indonesia] Sulawesi Utara, Dumoga Ketjil, rice paddy; NMV; ♂; ♀]. —Malicky et al. 2011: 162 [distribution].

Distribution. —Indonesia.

lironga Oláh & Johanson, 2010: 72 [type locality: Laos, Luang Namtha Province, Tong Om Village, 552 m; NHRS; ♂].

Distribution. —Laos.

maratya Wells & Malicky, 1997: 180 [type locality: [Indonesia] N Sumatra, Bukit Maratya, Sungai Bahapal, 03°00'N 99°14'E, 200 m asl; Collection Malicky; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 66 [atlas; ♂].

Distribution. —Indonesia.

matakail Wells & Huisman, 1993: 99 [type locality: West Malaysia, Kepong, Forest Research Institute of Malaya; NTM; ♂]. —Malicky 2010a: 68 [atlas; ♂].

Distribution. —Malaysia.

menara Wells & Huisman, 1993: 97 [type locality: East Malaysia, Sarawak, Lambir National Park; NTM; ♂]. —Malicky 2010a: 66 [atlas; ♂].

Distribution. —Malaysia.

minutula Mey & Freitag, 2019: 211 [type locality: [Philippines], Palawan, Puerto Princesa, Brgy. Cabayugan, spring creek of Cabayugan River, SSW of Martarpi, 10°09'46"N, 118°49'29"E, 80 m a.s.l.; MPMP; ♂; ♀]. —Mey and Freitag 2020: 57 [distribution].

Distribution. —Philippines.

monga Oláh, 1989: 265. [type locality: Vietnam, Cucphuong, 400 m a.s.l.; HNHM; ♂]. —Wells & Huisman, 1993: 95 [♂]. —Malicky and Chantaramongkol 2007: 1051 [distribution]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 68 [atlas; ♂].

Distribution. —Malaysia, Thailand, Vietnam.

pallu Malicky & Prommi in Malicky 2009a: 16 [type locality: Thailand, Prov. Songkla, Hat Yai, 7°00'N, 100°30'E; MBBJ; ♂]. —Prommi and Permkan 2010: 295 [distribution]. —Malicky 2010a: 66 [atlas; ♂].

Distribution. —Thailand.

panayana Wells & Mey, 2002: 123 [type locality: [Philippines] Panay, San Remigio, Aningalan; ZMHB; ♂].

Distribution. —Philippines.

paruparu Wells & Huisman, 1993: 96 [type locality: East Malaysia, Sarawak, Lambir National Park; NTM; ♂]. —Malicky 2010a: 68 [atlas; ♂].

Distribution. —Malaysia.

phaiaka Malicky & Chantaramongkol, 2007: 1051 [type locality: Thailand, Tung Yaw, 19°08'N 98°39'E, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 67 [atlas; ♂].

Distribution. —Thailand.

piring Wells, 1993: 355 [type locality: [Indonesia], Bali, Bali Barat, Sg. Bandangung, N of Medewi; NTM; ♂]. —Malicky 2010a: 66 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

pisau Wells & Huisman, 1993: 98 [type locality: West Malaysia, Cameron Highlands, “40 mile” between Tanah Rata and Tapah, below falls; NTM; ♂]. —Malicky 2010a: 68 [atlas; ♂].

Distribution. —Malaysia.

poecilostola Mey, 1998a: 549 [type locality: Locality 1, northern slope of Mt. Agtuuganon range, 1050 m; ZMHB or institute in the Philippines; ♂]. —Malicky et al. 2011: 162 [distribution].

Distribution. —Indonesia, Philippines.

pornsawan Chantaramongkol & Malicky, 1986: 518 [type locality: [Sri Lanka], Sabaragamuwa Province, Kitulgala, 21 mi N von Ratnapura, 60–150 m; MZLA; ♂].

Distribution. —Sri Lanka.

pulmonaria (Xue & Yang, 1990): 124 [type locality: [China] Bawangling (320 m), Hainan; NAUJ; ♂; in *Stactobiella*]. —Yang et al. 1997b: 93 [checklist]. —Yang et al. 2005: 458 [checklist; in *Stactobiella*]. —Malicky and Chantaramongkol 2007: 1051 [♂; distribution, to *Chrysotrichia*]. —Oláh and Johanson 2010a: 73 [distribution]. —Malicky 2010a: 68 [atlas; ♂]. —Yang et al. 2016: 475 [checklist]. —Malicky et al. 2018: 1321–1324 [distribution].

—***tanduk*** Wells & Huisman, 1993: 97 [type locality: West Malaysia, Genting Highlands, Gombak, tributary Sg. Gombak above University of Malaya field station; NTM; ♂]. —Malicky and Chantaramongkol 2007: 1051 [to synonymy].

Distribution. —China, Laos, Malaysia, Thailand.

quirinus Malicky & Chantaramongkol, 2007: 1049 [type locality: Thailand, Kao Kitchakut NP, 12°50'N 102°07'E, 100 m; Collection Malicky; ♂]. —Malicky 2010a: 70 [atlas; ♂]. —Malicky et al. 2018: 1323 [distribution].

Distribution. —Thailand.

serrula Oláh & Johanson, 2010: 74 [type locality: Vietnam, Lamdong Province, Baoloc, loc. Chau stream; Collection Oláh; ♂].

Distribution. —Vietnam.

simplex Wells & Mey, 2002: 123 [type locality: [Philippines] Palawan, Cayasan, Babuyan River, ZMHB; ♂].

Distribution. —Philippines.

sinuosa Mey, 2003b: 431 [type locality: Philippines, Leyte, Baybay, Mt. Panasugan; ZMHB, to be transferred to either UPLB or MPMP; ♂].

Distribution. —Philippines.

siriya Chantaramongkol & Malicky, 1986: 518 [type locality: [Sri Lanka], Sabaragamuwa Province, 5 mi NNW von Balangoda, 725 m; MZLA; ♂].

Distribution. —Sri Lanka.

skamandros Malicky & Chantaramongkol, 2007: 1049 [type locality: Thailand, Doi Suthep NP, Montatan WF, 18°49'N 98°55'E; Collection Malicky; ♂]. —Malicky 2010a: 70 [atlas; ♂].

Distribution. —Thailand.

sparta Malicky & Chantaramongkol, 2007: 1050 [type locality: Thailand, Chattrakan, 17°18'N 100°41'E; Collection Malicky; ♂]. —Malicky 2010a: 69 [atlas; ♂].

Distribution. —Thailand.

sukamade Wells & Malicky, 1997: 179 [type locality: [Indonesia] East Java, Meru Betiri, stream in savannah; ANIC; ♂]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 66 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

syrinx Malicky, 2008a: 839 [type locality: [Indonesia, Borneo, Kalimantan], im Einzugsbereich der Flüsse Seturan und Rian in einem engen Bereich von ungefähr 8 × 8 km ca. 70 km südlich der Stadt Malinau, 116°29'48"–116°33'29"E, 2°59'29"–3°04'04"N, 100–200 m; MZLS; ♂]. —Malicky 2010a: 67 [atlas; ♂].

Distribution. —Indonesia.

tabonensis Mey, 1998a: 549 [type locality: [Philippines] Mindanao, Surigao del Sur, Mangagoy, waterfall of Tabon River; ZMHB or institute in the Philippines; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

tajam Wells & Huisman, 1993: 95 [type locality: East Malaysia, Sabah, Tenom, stream behind Hotel Tenom; NTM; ♂]. —Malicky 2010a: 68 [atlas; ♂].

Distribution. —Malaysia.

talthybios Malicky & Chantaramongkol, 2007: 1050 [type locality: Thailand, Pong Düat; Collection Malicky; ♂]. —Malicky 2010a: 69 [atlas; ♂].

Distribution. —Thailand.

terpisaduri Wells, 1993: 355 [type locality: [Indonesia], Bali, Bali Barat, Sg. Bandangung, N of Medewi; NTM; ♂]. —Malicky 2010a: 69 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

thira Oláh & Johanson, 2010: 74 [type locality: Vietnam, Lamdong Province, Baoloc, Baco stream; Collection Oláh; ♂].

Distribution. —Vietnam.

tigacabanga Wells, 1990b: 370 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Tumpah R. tributary above first fall; NMV; ♂]. —Malicky et al. 2011: 162 [distribution].

Distribution. —Indonesia.

trifida Mey, 1998a: 547 [type locality: [Philippines] Locality 1, northern slope of Mt. Agtuuganon range, 1050 m; ZMHB or institute in the Philippines; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

trisula Wells, 1993: 354 [type locality: [Indonesia], Bali, Bali Barat, Sg. Bandangung, N. of Medewi; NTM; ♂]. —Malicky 2010a: 65 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

tydeus Malicky & Chantaramongkol, 2007: 1050 [type locality: Thailand, Taleban, 6°43'N 100°10'E; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 76 [distribution]. —Malicky 2010a: 69 [atlas; ♂].

Distribution. —Laos, Thailand.

vagot Oláh, 2016: 123 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂].

Distribution. —Indonesia.

vaskos Oláh, 2016: 124 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂]. —Oláh and Kovács 2018: 184 [distribution].

Distribution. —Indonesia.

volcanus Malicky & Chantaramongkol, 2007: 1050 [type locality: Thailand, Prov. Lampang, Chaeson NP, 18°46'N 99°28'E, 500 m; Collection Malicky; ♂]. —Melnitsky and Malicky 2008: 25 [distribution]. —Malicky 2010a: 69 [atlas; ♂]. —Malicky et al. 2018: 1323 [distribution].

Distribution. —Thailand.

watuwila Wells & Huisman, 2001: 207 [type locality: [Indonesia] Sulawesi Tenggara, N slope of Gunung Watuwila, 250 m, Sungai Mokowu; RMNH; ♂].

Distribution. —Indonesia.

zoroastres Malicky & Chantaramongkol, 2007: 1049 [type locality: Thailand, Namtok Pasua, 19°24'N 97°56'E, 300 m; Collection Malicky; ♂]. —Malicky 2010a: 70 [atlas; ♂].

Distribution. —Thailand.

Genus *Flintiella* Angrisano, 1995

Flintiella Angrisano, 1995a: 502 [type species: *Flintiella andreae* Angrisano, 1995a, original designation]. —Harris et al. 2002b: 65 [revision; key to males].

The genus *Flintiella* is represented by 17 species occurring in the Neotropical faunal region. Angrisano (1995a) established the genus based on the lack of ocelli and a tarsal formula (0, 2, 3) that is unique within the tribe to the Americas; she described the female, larva, and case of *F. andreae*. Members of *Flintiella* are similar in appearance to those of *Stactobiella*, differing mainly in genitalic features and the lack of ocelli (Flint et al. 1999a).

alajuela Harris, Flint, & Holzenthal, 2002a: 66 [type locality: Costa Rica, Alajuela, Rio Pizote, ca. 5 km N Dos Rios, 10.948°N 85.291°W, 40 m; NMNH; ♂].

Distribution. —Costa Rica.

andreae Angrisano, 1995a: 503 [type locality: Uruguay, Artigas, Ao. de la Invernada; FHCU; ♂; ♀; larva; case]. —Angrisano 1999: 32 [checklist]. —Harris et al. 2002b: 75 [♂; ♀; re-description]. —Angrisano and Sganga 2007: 28 [♂; ♀; larva; pupa; distribution]. —de Souza et al. 2013: 585 [distribution]. —Paprocki and França 2014: 44 [checklist].

Distribution. —Argentina, Brazil, Uruguay.

astilla Harris, Flint, & Holzenthal, 2002a: 69 [type locality: Venezuela, Amazonas, Rio Cataniapo, 10 km S Puerto Ayacucho; NMNH; ♂; ♀]. —Calor 2011: 321 [checklist]. —Nogueira and Cabette 2011: 351 [distribution]. —Paprocki and França 2014: 44 [checklist]. —Ríos-Touma et al. 2017: 9 [checklist].

Distribution. —Brazil, Costa Rica, Ecuador, Paraguay, Peru, Venezuela.

boraceia Harris, Flint, & Holzenthal, 2002a: 69 [type locality: Brazil, São Paulo, Estacion Biologica Boracéia; MZUSP; ♂]. —Paprocki et al. 2004: 11 [checklist]. —Calor 2011: 321 [checklist]. —Paprocki and França 2014: 44 [checklist].

Distribution. —Brazil.

carajas Santos, Jardim, & Nessimian, 2011: 803 [type locality: Brazil, Pará, Parauapebas (Floresta Nacional de Carajás, small stream, 06°04'57"S 50°08'05"W, 642 m; DZRJ; ♂; ♀]. —Paprocki and França 2014: 44 [checklist].

Distribution. —Brazil.

harma Oláh & Johanson, 2011: 248 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°32.833'N 52°11.452'W, 77 m; NHRS; ♂].

Distribution. —French Guiana.

harrisi de Souza, Santos, & Takiya, 2016b: 341 [type locality: Brazil, Piauí, Piracuruca, Parque Nacional de Sete Cidades, Riacho Piedade, 04°06'34"S 41°4'39"W, 169 m; CZMA; ♂]. —Moreno et al. 2020: 265 [distribution].

Distribution. —Brazil.

heredia Harris, Flint, & Holzenthal, 2002a: 77 [type locality: Costa Rica, Heredia, Rio Bijagual on road to Magsasay, 10.408°N 84.076°W, 140 m; NMNH; ♂; ♀]. —Armitage et al. 2016: 7 [distribution]. —Ríos-Touma et al. 2017: 9 [checklist]. —Armitage and Harris 2018b: 97 [checklist]. —Harris and Armitage 2019: 4 [distribution].

Distribution. —Costa Rica, Ecuador, Panama, Peru.

leloga Oláh & Johanson, 2011: 250 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°33.035'N 52°11.661'W, 104 m; NHRS; ♂].

Distribution. —French Guiana.

manauara Santos & Nessimian, 2009b: 65 [type locality: Brazil, Amazonas, Manaus, tributary to Rio Branquinho, 02°31'24.6"S 60°20'05.3"W; INPA; ♂; ♀]. —Paprocki and França 2014: 45 [checklist].

Distribution. —Brazil.

pallida de Souza, Santos, & Takiya, 2016b: 341 [type locality: Brazil, Maranhão, Carolina, Parque Nacional da Chapada das Mesas, Riacho Cancela, 07°06'43.4"S 47°17'16.6"W, 186 m; CZMA; ♂].

Distribution. —Brazil.

panamensis Harris, Flint, & Holzenthal, 2002a: 79 [type locality: Panama, Panama, Barro Colorado Island, Snyder-Molino trail; NMNH; ♂]. —Armitage et al. 2015a: 6 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Panama.

pizotensis Harris, Flint, & Holzenthal, 2002a: 73 [type locality: Costa Rica, Limon, Rio Telire and small tributaries SE Suretka, 9.554°N 82.892°W, 48 m; NMNH; ♂; ♀]. —Dumas et al. 2010: 8 [distribution]. —Paprocki and França 2014: 45 [checklist]. —Armitage et al. 2015a: 6 [checklist]. —Ríos-Touma et al. 2017: 9 [checklist]. —Armitage and Harris 2018b: 97 [checklist].

Distribution. —Brazil, Colombia, Costa Rica, Ecuador, Mexico, Nicaragua, Panama, Peru.

serrana Gama Neto, Ribeiro, & Passos, 2020: 285 [type locality: Brazil, Roraima, Amajari municipality, Serra do Tepequém, unnamed small-order stream, 03°48'17.06"N, 61°44'49.8"W, 600 m a.s.l.; MPEG; ♂].

Distribution. —Brazil.

tamaulipasa Harris, Flint, & Holzenthal, 2002a: 79 [type locality: Mexico, Tamaulipas, Rio Frio at La Poza Azul, near Gomez Farias; NMNH; ♂; ♀]. —Ríos-Touma et al. 2017: 9 [distribution]. —Barba-Álvarez et al. 2019: 85 [distribution].

Distribution. —Ecuador, Mexico.

triaena Gama Neto, Ribeiro, & Passos, 2020: 286 [type locality: Brazil, Pará, São Geraldo do Araguaia Municipality, Serra das Andorinhas, Santa Cruz stream, 06°13'31.1"S, 48°26'28.1"W, 124 m a.s.l. INPA; ♂].

Distribution. —Brazil.

yanamona Harris, Flint, & Holzenthal, 2002a: 79 [type locality: Peru, Loreto, small stream near Explorama Lodge; NMNH; ♂].

Distribution. —Peru.

Genus *Maetalaiptila* Malicky & Chantaramongkol, 2007

Maetalaiptila Malicky & Chantaramongkol, 2007: 1055 [type species: *Maetalaiptila pyramus* Malicky & Chantaramongkol, 2007, original designation].

Maetalaiptila contains a single species occurring in Thailand. Malicky and Chantaramongkol (2007) established the genus based on features of the male genitalia and placed it in Stactobiinae because of the presence of the transverse suture on the mesoscutellum. The female and larva are unknown.

pyramus Malicky & Chantaramongkol, 2007: 1055 [type locality: Thailand, Mae Talai (S Chiang Dao), 19°16'N 98°57'E, 400 m; Collection Malicky; ♂]. —Malicky 2010a: 56 [atlas; ♂].

Distribution. —Thailand.

Genus *Niuginitrichia* Wells, 1990

Niuginitrichia Wells, 1990a: 820 [type species: *Niuginitrichia bukamak* Wells, 1990a, original designation]. —Wells 1990a: 822 [key to males]. —Wells and Huisman 2001: 208 [new records].

The genus *Niuginitrichia* consists of 24 species occurring in Indonesia and New Guinea. Wells (1990a) noted that there are many similarities between *Niuginitrichia* and *Plethus*, but that the former can be clearly separated by the absence of ocelli and differences in the male genitalia. Female, larva, pupa, and case were described by Wells (1990a).

arakain Wells, 1990a: 825 [type locality: Papua New Guinea, soak at Kapao on Bulolo-Aseki road, 7°15'S 146°20'E; ANIC; ♂]. —Well 1991: 526 [checklist].

Distribution. —Papua New Guinea.

bogos Oláh, 2016: 126 [type locality: Indonesia, West Papua, Batanta Island, valley of Warai stream, 00°50'51.0", 130°35'14.0"; Collection Oláh; ♂].

Distribution. —Indonesia.

bomberi Wells, 1990a: 833 [type locality: [Western] New Guinea, Irian Jaya, Fak Fak, Bomberi, 2°55'S 132°17'E; BPBM; ♂]. —Wells 1991: 526 [checklist; as *bombieri*].

Distribution. —Indonesia.

brukimnamel Wells, 1990a: 828 [type locality: Papua New Guinea, Central Province, Aieme River, 9°25'S 147°35'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

bukamak Wells, 1990a: 823 [type locality: Papua New Guinea, Central Province, Laloki River, Rouna Falls, 9°25'S 147°27'E; ANIC; ♂; ♀; larva; pupa; case]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

eiloga Wells, 1990a: 825 [type locality: Papua New Guinea, Central Province, Eilogo Creek, nr Sogeri, 9°27'S 147°27'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

haromsog Oláh, 2016: 126 [type locality: Indonesia, West Papua, Batanta Island, valley of Kaliselatan River, 00°53'42.0", 130°35'49.1"; Collection Oláh; ♂].

Distribution. —Indonesia.

harmas Oláh in Oláh and Kovács 2018: 184 [type locality: Indonesia, West Papua, Batanta Island, valley of Waibin river, S00°50'01.9", E130°45'24.8"; Collection Oláh; ♂].

Distribution. —Indonesia.

homora Oláh in Oláh and Kovács 2018: 185 [type locality: Indonesia, West Papua, Batanta Island, valley of Tanjung Lampu, 00°53'43.0"S, 130°36'38.5"E; Collection Oláh; ♂].

Distribution. —Indonesia.

huzva Oláh, 2013: 76 [type locality: Indonesia, Papua, Raja Ampat, Batanta Island, northern coast, Warder River, S .084374°, E 130.52457°, shipable endpoint; Collection Oláh; ♂]. —Oláh and Kovács 2018: 186 [distribution].

Distribution. —Indonesia.

ismayi Wells, 1990a: 823 [type locality: Papua New Guinea, Central Province, Tapini, 8°16'S 146°55'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

ives Oláh, 2016: 127 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂].

Distribution. —Indonesia.

kesken Oláh, 2016: 128 [type locality: Indonesia, West Papua, Batanta Island, valley of Kaliselatan River, 00°53'42.0", 130°35'49.1"; Collection Oláh; ♂]. —Oláh and Kovács 2018: 186 [distribution].

Distribution. —Indonesia.

kover Oláh, 2016: 129 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂].

Distribution. —Indonesia.

kurukut Wells, 1990a: 828 [type locality: Papua New Guinea, Central Province, Laloki River, Rouna Falls, on soak, 9°25'S 147°27'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

namelbanis Wells, 1990a: 828 [type locality: Papua New Guinea, East Highlands Province, Ukarumpa, Ram Creek, 6°17'S 145°50'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

negsog Oláh, 2016: 130 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalijakut River, 0°52'52.0", 130°38'8.0"; Collection Oláh; ♂].

Distribution. —Indonesia.

peregai Wells, 1990a: 830 [type locality: Papua New Guinea, East Highlands Province, Peregai, 6°09'S 144°11'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

rouna Wells, 1990a: 832 [type locality: Papua New Guinea, Central Province, Laloki River, Rouna Falls, on soak, 9°25'S 147°27'E; ANIC; ♂; ♀]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

sapimarere Wells, 1990a: 830 [type locality: Papua New Guinea, Central Province, Aieme River, 9.25'S 147°35'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

sulawesica Wells & Huisman, 2001: 208 [type locality: Sulawesi Tenggara, N slope of Gunung Watuwila, 250 m, Sungai Mokowu; RMNH; ♂].

Distribution. —Indonesia.

ukarumpa Wells, 1990a: 833 [type locality: [Papua New Guinea], East Highlands Province, Ukarumpa, Ram Creek, 6°16'S 145°50'E; ANIC; ♂]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

umboina Wells, 1990a: 832 [type locality: Papua New Guinea, Umboi Island, ca. 8 km WNW. Lab Lab; BPBM; ♂; case]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

vagva Oláh in Oláh and Kovács 2018: 186 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalijakut River, 00°52'49.1"S, 130°38'04.9"E; Collection Oláh; ♂].

Distribution. —Indonesia.

Genus *Pseudoxyethira* Schmid, 1958

Scelotrichia Ulmer, 1951: 73 [type species: *Scelotrichia saranganica* Ulmer, 1951, original designation]. —Marshall 1979b: 174 [generic review]. —Wells 1990a: 840 [key to New Guinea species]. —Koçak and Kemal 2012: 4 [preoccupied in Hemiptera by Reuter 1890: 291, replaced with *Orientalitrichia*].

Pseudoxyethira Schmid, 1958b: 44 [type species: *Pseudoxyethira asgiriskanda* Schmid, 1958b, original designation]. —Marshall 1979b: 174 [generic review]. —Wells 1990b: 373 [to synonymy with *Scelotrichia*]. —Zhou et al. 2016: 214 [re-established as valid name]. —Ito 2017b: 194 [revision of Japanese species].

Madioxyethira Schmid, 1960: 89 [type species: *Madioxyethira milinda* Schmid, 1960, original designation]. —Marshall 1979b: 173 [generic review]. —Wells 1990b: 373 [to synonymy with *Scelotrichia*].

Orientalitrichia Koçak & Kemal, 2012: 4 [type species: *Scelotrichia saranganica* Ulmer, 1951, replacement name]. —Zhou et al. 2016: 214 [inappropriate replacement name].

The genus *Pseudoxyethira* is represented by 64 species occurring mainly in Southeast Asia. A single species, *P. glandulosa*, has been recorded from Tanzania (Wells and Andersen 1995). Marshall (1979b) stated that the genus belongs in Stactobiinae due to the postoccipital lobes of the adult head, which are very similar to those of *Madioxyethira*, and the presence of the transverse suture on the adult thorax. Wells described the general form of the larvae, pupa, and case of the genus (1990a).

akaiah (Malicky, 2012): 1267 [type locality: China, Setschuan, Qingyin Pavilion, Jingshui, Emei Shan, 180 km SW Chengdu, 800–1200 m; Collection Malicky; ♂; in *Scelotrichia*]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

alata (Wells & Mey, 2002): 116 [type locality: [Philippines] Palawan, Puerto Princesa, Cayasan, Balsahan; ZMHB; ♂; in *Scelotrichia*].

Distribution. —Philippines.

asgiriskanda Schmid, 1958b: 45 [type locality: [Sri Lanka], Ceylan, Diyanilla (C. P., 4800 ft) 1-III, petit torrent pierreux, dans les plantations de thé; depository not designated; ♂].

Distribution. —Sri Lanka.

batanta (Oláh, 2016): 131 [type locality: Indonesia, West Papua, Batanta Island, valley of Kalisamsem River, 00°53'27.54", 130°33'31.62"; Collection Oláh; ♂; as *Scelotrichia*].

Distribution. —Indonesia.

bercabanghalus (Wells & Malicky, 1997): 177 [type locality: [Indonesia] N Sumatra, Huta Padang, 02°45'N 99°14'E; Collection Malicky; ♂; in *Scelotrichia*]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 64 [atlas; ♂].

Distribution. —Indonesia.

bilah (Wells & Huisman, 1993): 106 [type locality: East Malaysia, Sabah, Long Pa Sia area, Sg. Ritan, 04°24'N 115°42'E, 1160 m; RMNH; ♂; in *Scelotrichia*]. —Malicky 2010a: 63 [atlas; ♂].

Distribution. —Malaysia.

bispinosa (Wells & Mey, 2002): 116 [type locality: [Philippines] Panay, San Reminigio, Aningalan; BPBM; ♂; in *Scelotrichia*].

Distribution. —Philippines.

buluhalus (Wells & Huisman, 1993): 107 [type locality: East Malaysia, Sabah, 60 km W Lahad Datu, DVFC [=Danum Valley Field Centre] nr bridge, 04°58'N 117°48'E, 150 m; RMNH; ♂; in *Scelotrichia*]. —Wells and Malicky 1997: 176 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 60 [atlas; ♂].

Distribution. —Indonesia, Malaysia.

cavernosa (Mey, 1996): 50 [type locality: Nord Vietnam, nordwestlich von Sa Pa, Fan Si Pan Gebirgsmassiv, Westseite, 1400–1600 m; ZMHB; ♂; in *Scelotrichia*]. —Armitage et al. 2005: 28 [checklist]. —Mey 2005a: 281 [distribution]. —Malicky 2010a: 64 [atlas; ♂].

Distribution. —Vietnam.

cayasana (Wells & Mey, 2002): 118 [type locality: [Philippines] Palawan, Cayasan, Babuyan River; ZMHB; ♂; in *Scelotrichia*].

Distribution. —Philippines.

ceesi (Wells & Huisman, 1993): 108 [type locality: East Malaysia, Sabah, 8.5 km S Long Pa Sia, Sg. Malabit, 04°21'N 115°41'E, 1180 m; RMNH; ♂; in *Scelotrichia*]. —Malicky 2010a: 61 [atlas; ♂].

Distribution. —Malaysia.

dasar (Wells & Huisman, 1993): 107 [type locality: West Malaysia, Templer's Park; NTM; ♂; in *Scelotrichia*]. —Malicky 2010a: 61 [atlas; ♂].

Distribution. —Malaysia.

digitata (Wells & Mey, 2002): 114 [type locality: [Philippines] Mindanao, Bukidnon, 1480 m, Mt Katanglad; ZMHB; ♂; in *Scelotrichia*].

Distribution. —Philippines.

dolichocera (Mey, 1998a): 551 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

egba Oláh in Oláh and Kovács 2018: 187 [type locality: Indonesia, West Papua, Batanta Island, valley of Warai stream, 00°50'59.3"S, 130°35'18.0"E; Collection Oláh; ♂].

Distribution. —Indonesia.

funatsuki Ito, 2017b: 197 [type locality: [Japan], Ryukyu Islands, Iriomote-jima, Nishi-funatsuki-gawa, Nishi0funatsuki-bashi, 24°18'10"N, 123°51'34"E, 10 m; CBM-ZI; ♂].

Distribution. —Japan.

gerigi (Wells & Huisman, 1993): 109 [type locality: East Malaysia, Sabah, 8.5 km S Long Pa Sia, Sg. Malabit, 04°21'N 115°41'E, 1180 m; RMNH; ♂; in *Scelotrichia*]. —Malicky 2010a: 61 [atlas; ♂].

Distribution. —Malaysia.

glandulosa (Wells & Andersen, 1995): 148 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 5, 1650 m a.s.l; ZMUB; ♂; in *Scelotrichia*].

Distribution. —Tanzania.

insularis (Mey, 1995): 193 [type locality: [Philippines], Mindoro, Paluan, Calawagan-Fluß; Collection Mey; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 116 [♂; distribution].

Distribution. —Philippines.

ishiharai (Utsunomiya, 1994): 345 [type locality: [Japan], Ôto, Cape Ashizuri-misaki, Kôchi Pref.; depository not designated; ♂; ♀; larva; in *Scelotrichia*]. —Ohkawa and Ito 2002: 450 [♂; ♀; larva; distribution]. —Satake and Kuranishi 2007: 282 [distribution]. —Tanida and Kuranishi 2016: 73 [checklist]. —Ito 2017b: 195 [♂; distribution].

Distribution. —Japan.

jari (Wells & Huisman, 1993): 109 [type locality: West Malaysia, Genting Highlands, tributary Sg. Gombak; NTM; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 118 [distribution]. —Oláh and Johanson 2010a: 79 [distribution]. —Malicky 2010a: 61 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Borneo, Indonesia, Malaysia, Philippines.

kait (Wells & Huisman, 1993): 105 [type locality: East Malaysia, Sabah, Kundassang, Mesilau East River; NTM; ♂; in *Scelotrichia*]. —Malicky 2010a: 64 [atlas; ♂].

Distribution. —Malaysia.

kakatu (Wells, 1990a): 840 [type locality: Papua New Guinea, West Highlands Province, Peregai, 6°09'S 144°11'E; ANIC; ♂; ♀; larva; pupa; case; in *Scelotrichia*]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

kenyella (Mey, 1992): 260 [type locality: [Kenya], Meru-Nationalpark; ZMHB; ♂; in *Madioxyethira*]. —Wells and Andersen 1995: 145 [checklist].

Distribution. —Kenya.

kipas (Wells & Huisman, 1993): 108 [type locality: East Malaysia, Sabah, Tenom; NTM; ♂; in *Scelotrichia*]. —Malicky 2010a: 60 [atlas; ♂]. —Malicky 2013: 43 [possible junior synonym of *P. thingana*].

Distribution. —Malaysia.

kurta (Oláh, 2016): 132 [type locality: Indonesia, West Papua, Batanta Island, valley of Warai stream, 00°50'51.0", 130°35'14.0"; Collection Oláh; ♂; as *Scelotrichia*]. —Oláh and Kovács 2018: 188 [distribution].

Distribution. —Indonesia.

ladik (Oláh & Johanson, 2010a): 79 [type locality: India, Tamil Nadu, Doddabetta, Nilgiri Hills, 1000 m; HNHM; ♂; in *Scelotrichia*].

Distribution. —India.

laitimtok (Wells, 1990a): 845 [type locality: Papua New Guinea, Central Province, Rouna Falls, 9.25°S 147°27'E; ANIC; ♂; ♀; in *Scelotrichia*]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

lampai (Wells & Huisman, 1993): 108 [type locality: West Malaysia, Selangor district, Templer's Park, 20 km NW Kuala Lumpur; NTM; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 118 [distribution]. —Malicky 2010a: 61 [atlas; ♂].

—*hexalocha* (Mey, 1998a): 551 [type locality: [Philippines, Mindanao], northern slope of the Mt. Atuganon range, 1050 m; ZMHB; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 118 [to synonymy].

Distribution. —Malaysia, Philippines.

levis (Wells & Dudgeon, 1990): 163 [type locality: Hong Kong, Tai Po Kao Forest stream; NHMUK; ♂; in *Scelotrichia*]. —Yang et al. 2016: 477 [checklist].

Distribution. —Hong Kong.

licini (Wells, 1990b): 376 [type locality: [Indonesia] Sulawesi Utara, Dumoga-Bone N.P., Tumpah R. tributary first fall; NMV; ♂; ♀; larva; case; in *Scelotrichia*]. —Malicky et al. 2010: 163 [distribution].

Distribution. —Indonesia.

litai (Malicky & Chantaramongkol, 2007): 1052 [type locality: Bhutan, Tsirang, Rongchhu, 26°59'N 90°09'E, 1700 m; ♂; in *Scelotrichia*]. —Malicky 2010a: 63 [atlas; ♂].

Distribution. —Bhutan.

mador (Malicky, 2012): 1267 [type locality: China, Jiangxi, Hinggang Shan, Xiangzhou vill., 374 m, 26°35'N, 114°16'E; Collection Malicky; ♂; in *Scelotrichia*]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

malayana (Oláh & Johanson, 2010a): 80 [type locality: Malaysia, Perak, Temengor Lake; NHMUK; ♂; in *Scelotrichia*].

Distribution. —Malaysia.

marshalli (Statzner, 1977): 399 [type locality: Zaire, Kivu Region, Kalengo stream 10 km west of Lake Kivu; ZMHB; ♂; ♀; in *Madioxyethira*].

Distribution. —Congo.

melanella (Mey, 1998a): 551 [type locality: [Philippines, Mindanao], nr Caatjaan, valley of the Simulau river; ZMHB; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

melanoptera (Mey, 1998a): 547 [type locality: [Philippines, Mindanao], nr Caatjaan, valley of the Simulau river; ZMHB; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

milinda (Schmid, 1960): 90 [type locality: [Pakistan, Karakoram, Shinghai Gah; CNC; ♂; in *Madioxyethira*]. —Schmid 1958c: 220 [as new species, *nomen nudum*]. —Malicky and Chantaramongkol 2007: 1052 [distribution]. —Malicky 2013: 43 [possible senior synonym of *P. nepalensis*]. —Mattern 2015: 502 [distribution]. —Malicky 2018: 49 [checklist]. —Lonsdale 2020: 37 [holotype depository].

Distribution. —Nepal, Pakistan.

milka (Malicky, Ivanov, & Melnitsky, 2011): 1494 [type locality: [Indonesia], Lombok, Kembangkuning, 525 m; ZIN; ♂; in *Scelotrichia*]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

mindanaoensis (Wells & Mey, 2002): 116 [type locality: [Philippines] Mindanao, Bukidnon, 1480 m, Mt Katanglad; BPBM; ♂; in *Scelotrichia*].

Distribution. —Philippines.

miselia (Mey, 1998a): 551 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m; ZMHB; ♂; in *Scelotrichia*]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

nana (Mey, 1996): 50 [type locality: Nord Vietnam, nordwestlich von Sa Pa, Fan Si Pan Gebirgsmassiv, Westseite, 1400–1600 m; ZMHB; ♂; in *Scelotrichia*]. —Armitage et al. 2005: 28 [checklist]. —Mey 2005a: 281 [distribution]. —Malicky 2010a: 60 [atlas; ♂]. —Malicky 2013: 43 [possible junior synonym of *P. thingana*].

Distribution. —Vietnam.

nepalensis (Kimmings, 1964): 46 [type locality: [Nepal], Taplejung Distr., Sangu, c. 6,200 ft., mixed vegetation by stream in gully; NHMUK; ♂; in *Madioxyethira*]. —Malicky 2006: 253 [checklist]. —Malicky 2013: 43 [possible junior synonym of *P. milinda*]. —Mattern 2015: 502 [distribution].

Distribution. —Nepal.

nikolayi (Malicky, Ivanov, & Melnitsky, 2011): 1493 [type locality: [Indonesia], Lombok, Senaru, 440–590 m; ZIN; ♂; in *Scelotrichia*]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

paku (Wells & Huisman, 1993): 110 [type locality: East Malaysia, Sabah, 2 km SW Long Pa Sia, confluence Sg. Ritan, Sg. Rurun, 04°21'N 115°42'E; RMNH; ♂; in *Scelotrichia*]. —Malicky 2010a: 62 [atlas; ♂].

—**tuskes** (Oláh & Johanson, 2010a): 82 [type locality: Malaysia, Sabah, Tawau, Maliau Basin Nepenthes Camp, Camel Trophy Hut, 4°43'59.3"N 116°52'39.7"E, 999 m; ♂; in *Scelotrichia*]. —Malicky 2013: 43 [to synonymy].

Distribution. —Malaysia.

pucat (Wells & Huisman, 1993): 105 [type locality: East Malaysia, Sabah, Kundassang, Mesilau East River; NTM; ♂; in *Scelotrichia*]. —Malicky 2010a: 62 [atlas; ♂].

Distribution. —Malaysia.

rienki (Wells & Huisman, 1993): 105 [type locality: West Malaysia, Templer's Park, 20 km NW of Kuala Lumpur; NTM; ♂; in *Scelotrichia*]. —Malicky 2010a: 64 [atlas; ♂].

Distribution. —Malaysia.

rincorama (Oláh, 1989): 269 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; HNHM; ♂; in *Scelotrichia*]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 63 [atlas; ♂].

Distribution. —Vietnam.

rumput (Wells & Huisman, 1993): 106 [type locality: East Malaysia, Sarawak, Lambir National Park; NTM; ♂; in *Scelotrichia*]. —Malicky 2010a: 62 [atlas; ♂].

Distribution. —Malaysia.

saranganica (Ulmer, 1951): 74 [type locality: [Indonesia], Java, Sarangan, Wasserfall des Kali Pagergede; ZMUH; ♂; in *Scelotrichia*]. —Wells and Malicky 1997: 176 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 61 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

schmidi (Mey, 1981): 58 [type locality: [China], Tschatkalski Chrebet, bei Kumyschkan (Nord-westlicher Tienshan); NMPG; ♂; in *Madioxyethira*]. —Spuris 1989: 16 [checklist]. —Malicky, 1983b: 66 [atlas; ♂]. —Malicky 2004a: 74 [atlas]. —Malicky 2005b: 549 [checklist]. —Küçükbasmaci and Canbulat 2020: 114 [distribution].

Distribution. —China, Kyrgyzstan, Russia.

simplex (Wells & Malicky, 1997): 177 [type locality: [Indonesia] N Sumatra, Huta Padang, 02°45'N 99°14'E; Collection Malicky; ♂; in *Scelotrichia*]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 64 [atlas; ♂].

Distribution. —Indonesia.

supsup (Wells, 1990a): 845 [type locality: Papua New Guinea, Central Province, Eilogo Creek, 9°27'S 147°27'E; ANIC; ♂; in *Scelotrichia*]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

tatius (Malicky & Chantaramongkol, 2007): 1052 [type locality: Thailand, Mae Talai, 19°16'N 98°57'E, 400 m; ♂; in *Scelotrichia*]. —Malicky 2010a: 62 [atlas; ♂].

Distribution. —Thailand.

telegonos (Malicky & Chantaramongkol, 2007): 1052 [type locality: Thailand, Doi Inthanon NP, Mae Klang bei 960 m, 18°32'N, 98°34'E; ♂; in *Scelotrichia*]. —Malicky 2010a: 63 [atlas; ♂].

Distribution. —Thailand.

tellus (Malicky & Chantaramongkol, 2007): 1052 [type locality: Thailand, Doi Inthanon NP, Bang Khun Klang, 98°32'E 18°32'N, 1200 m; ♂; in *Scelotrichia*]. —Malicky 2010a: 60 [atlas; ♂].

Distribution. —Thailand.

temenos (Malicky & Chantaramongkol, 2007): 1053 [type locality: Thailand, Doi Inthanon NP, Bang Khun Klang, 98°32'E 18°32'N, 1200 m; ♂; in *Scelotrichia*]. —Malicky 2010a: 63 [atlas; ♂].

Distribution. —Thailand.

thingana (Oláh, 1989): 267 [type locality: Vietnam, Tamdao, tributary from high mountain of Tamdao, 200 m a.s.l.; HNHM; ♂; in *Scelotrichia*]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 60 [atlas; ♂]. —Malicky 2013: 43 [possible senior synonym to *P. kipas* and *P. nana*]. —Zhou et al. 2016: 214 [♂; distribution]. —Ito 2017b: 197 [♂; distribution].

Distribution. —China, Vietnam.

thunama (Oláh, 1989): 270 [type locality: Vietnam, Cucphuong, 400 m a.s.l.; HNHM; ♂; in *Scelotrichia*]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 64 [atlas; ♂].

Distribution. —Vietnam.

toira (Oláh, 1989): 268 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; HNHM; ♂; in *Scelotrichia*]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 62 [atlas; ♂].

Distribution. —Vietnam.

trifurcata (Jacquemart, 1962b): 4 [type locality: Congo, Katanga, Sandoa; IRSNB; ♂; in *Hydroptila*]. —Marshall 1979 [to *Madioxyethira*].

Distribution. —Congo.

vekonul (Oláh, 2016): 133 [type locality: Indonesia, West Papua, Batanta Island, valley of Warai stream, 00°50'51.0", 130°35'14.0"; Collection Oláh; ♂; as *Scelotrichia*]. —Oláh and Kovács 2018: 188 [distribution].

Distribution. —Indonesia.

warabai (Wells, 1990a): 842 [type locality: Papua New Guinea, West Highland Province, Ukarumpa, Ba'i River, in gorge N. of village, 6°17'S 145°50'E; ANIC; ♂; ♀; in *Scelotrichia*]. —Wells 1991: 526 [checklist].

Distribution. —Papua New Guinea.

willcairnsi (Cairns & Wells, 2008): 2612 [type locality: [Australia], North Queensland, Fishery Falls, south of Cairns, 17°11'S, 145°52'E; ANIC; ♂; ♀; larva; in *Scelotrichia*].

Distribution. —Australia.

Genus *Orinocotrichia* Harris, Flint, & Holzenthal, 2002

Orinocotrichia Harris, Flint, & Holzenthal, 2002c: 50 [type species: *Orinocotrichia calcariga* Harris, Flint, & Holzenthal, 2002c, original designation].

Orinocotrichia is represented by three species, occurring in northeastern South America. The larva is unknown. Based on similarities in the adult head and the male and female genitalia, the genus is most closely related to *Flintiella* (Harris et al. 2002c).

angelus de Souza, Santos, & Takiya, 2016b: 338 [type locality: Brazil, Maranhão, Carolina, Parque Nacional da Chapada das Mesas, Riacho Cancela, 07°06'43.4"S 47°17'16.6"W, 186 m; CZMA; ♂].

Distribution. —Brazil.

calcariga Harris, Flint, & Holzenthal, 2002b: 51 [type locality: Venezuela, T. F. Amazonas, Río Cataniapo, 10 km S Puerto Ayacucho; NMNH; ♂; ♀].

Distribution. —Venezuela.

tagola Oláh & Johanson, 2011: 251 [type locality: French Guiana, Approuaguekaw, Kaw Mt, 4°32.833'N 52°11.452'W, 77 m; NHRS; ♂].

Distribution. —French Guiana.

Genus *Plethus* Hagen, 1887

Plethus Hagen, 1887: 643 [type species: *Hydroptila cursitans* Hagen, 1887, monotypic]. —Marshall 1979b: 168 [generic review]. —Malicky 2013: 43 [possible junior synonym to *Stactobia*]. —Ito and Saito 2016: 467 [generic review].

Plethotrichia Ulmer, 1951: 65 [type species: *Plethotrichia baliana* Ulmer 1951, original designation]. —Marshall 1979b: 168 [to synonymy].

Twenty-seven species are currently included in the genus *Plethus*, occurring in south and Southeast Asia. Ulmer (1957) provided larval descriptions of both *P. acutus* and *P. cruciatus*. Marshall (1979b) considered *Plethus* to be most closely related to *Stactobia* and stated that it can be distinguished from *Stactobia* by its overall smaller size, less specialized genitalia, and larvae.

acutus Ulmer, 1951: 64 [type locality: [Indonesia], Java, Badequelle am See Bedali; ZMUH; ♂]. —Malicky 2013: 43 [possible junior synonym to *Plethus cruciatus*].

Distribution. —Indonesia.

amogawarsa Schmid, 1958b: 52 [type locality: [Sri Lanka], Ceylan, Nuwara Eliya (C. P.) 26-II, cours supérieur de la Nanu Oya, petite rivière rapide, sur lit caillouteux; depository not designated; ♂].

Distribution. —Sri Lanka.

baliana (Ulmer, 1951): 66 [type locality: [Indonesia], Bali, Quelle unterhalb Tamantanda nahe Baturiti; ZMUH; ♂; in *Plethotrichia*]. —Wells 1993: 353 [distribution]. —Malicky 2010a: 57 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

banchaia Oláh, 1989: 261 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky and Chantaramongkol 2007: 1047 [♂; distribution]. —Malicky 2010a: 57 [atlas; ♂].

Distribution. —Thailand, Vietnam.

berbulu Wells, 1993: 353 [type locality: [Indonesia], Bali, Bali Barat, Sg. Pancoseming, N of Batuagung, near Negara; NTM; ♂]. —Malicky and Chantaramongkol 2007:

1048 [distribution]. —Malicky 2010a: 58 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

bishopi Wells & Huisman, 1993: 100 [type locality: West Malaysia, Genting Highlands, Gombak, tributary of Sg. Gombak above University of Malaya field station; NTM; ♂; case]. —Malicky 2010a: 57 [atlas; ♂].

Distribution. —Malaysia.

bodikatuwa Schmid, 1958b: 53 [type locality: [Sri Lanka], Ceylan, Kandy (C. P., 2000 ft) 14-I, petite rivière encaissée et raide, dans la jungle, avec ruissellements latéraux; depository not designated; ♂].

Distribution. —Sri Lanka.

cilamegha Schmid, 1958b: 53 [type locality: [Sri Lanka], Ceylan, Kitulgala (Sab., 750 ft) 2-III, Kelani Ganga, belle rivière coulant dans une vallée étroite et boisée, à la sortie des montagnes; depository not designated; ♂].

Distribution. —Sri Lanka.

cruciatus Ulmer, 1951: 62 [type locality: [Indonesia], Sumatra, Bach beim Hause des Konsuls Schild unweit Padang; ZMUH; ♂; ♀]. —Wells and Malicky 1997: 176 [distribution]. —Malicky 2007a: 177 [checklist]. —Malicky 2010a: 58 [atlas; ♂]. —Malicky 2013: 43 [possible senior synonym to *Plethus acutus*]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

cursitans (Hagen, 1859): 209 [type locality: [Sri Lanka] Ceylon, Rambodde; depository not designated; ♂; in *Hydroptila*]. —Eaton 1873: 148 [comments on general appearance]. —Hagen 1887: 645 [♂, ♀]. —Schmid 1958b: 51 [♂; distribution].

Distribution. —Sri Lanka.

hinchuna Oláh & Johanson, 2010a: 76 [type locality: Vietnam, Lamdong Province, Baoloc, Duchma stream; Collection Oláh; ♂].

Distribution. —Vietnam.

kala Schmid, 1960: 92 [type locality: [Pakistan] Himalaya, Balakot; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —Pakistan.

roreta Oláh, 1989: 262 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 58 [atlas; ♂].

Distribution. —Vietnam.

sarkos Oláh & Johanson, 2010: 78 [type locality: India, Karnataka, Shimoga District, Jog Falls; HNHM; ♂].

Distribution. —India.

scaevola Malicky & Chantaramongkol, 2007: 1047 [type locality: Thailand, Boripat WF, 6°59'N 100°09'E, 200 m; Collection Malicky; ♂]. —Malicky 2010a: 57 [atlas; ♂]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Malaysia, Thailand.

segitiga Wells & Huisman, 1993: 101 [type locality: West Malaysia, Kepong, Forest Research Institute of Malaya; NTM; ♂; case]. —Malicky 2010a: 57 [atlas; ♂].

Distribution. —Malaysia.

sigiama Oláh, 1989: 260 [type locality: Vietnam, Hoahbinh, Ha Son Binh Province, singled at a small spring waterfall; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 58 [atlas; ♂].

Distribution. —Vietnam.

tarquinius Malicky & Chantaramongkol, 2007: 1048 [type locality: Thailand, Doi Suthep NP, Montatan WF, 18°49'N 98°55'E; Collection Malicky; ♂]. —Malicky 2010a: 58 [atlas; ♂].

Distribution. —Thailand.

tartaros Malicky & Chantaramongkol, 2007: 1048 [type locality: Thailand, Doi Suthep NP, 18°49'N 98°55'E, 1000 m; Collection Malicky; ♂]. —Malicky 2010a: 58 [atlas; ♂]. —Melnitsky et al. 2019: 539 [distribution].

Distribution. —Malaysia, Thailand.

teiresias Malicky & Chantaramongkol, 2007: 1048 [type locality: Thailand, Chattrakan, 17°18'N 100°41'E; Collection Malicky; ♂]. —Malicky 2010a: 57 [atlas; ♂].

Distribution. —Thailand.

toana Oláh, 1989: 263 [type locality: Vietnam, Tamdao, 1300 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 58 [atlas; ♂].

Distribution. —Vietnam.

tullius Malicky & Chantaramongkol, 2007: 1046 [type locality: Thailand, Doi Inthanon NP, Bang Khun Klang, 98°32'E, 18°32'N, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 57 [atlas; ♂].

Distribution. —Thailand.

udawasadenna Schmid, 1958b: 54 [type locality: [Sri Lanka], Ceylan, Kandy (C. P., 2000 ft) 14-I, petite rivière encaissée et raide, dans la jungle, avec ruissellements latéraux; depository not designated; ♂].

Distribution. —Sri Lanka.

ukalegon Malicky & Chantaramongkol, 2007: 1047 [type locality: Taiwan, Taipei co., N Shihpei, 24°54'N 121°46'E, 435 m; Collection Malicky; ♂]. —Malicky 2014a: 1623 [checklist]. —Yang et al. 2016: 477 [checklist]. —Ito and Saito 2016: 468 [distribution; ♂; ♀; larva].

Distribution. —Japan, Taiwan.

ulixes Malicky & Chantaramongkol, 2007: 1047 [type locality: Thailand, Doi Suthep NP, Montatan WF, 18°49'N 98°55'E; Collection Malicky; ♂]. —Malicky 2010a: 58 [atlas; ♂]. —Malicky et al. 2018: 1323 [distribution].

Distribution. —Thailand.

uranos Malicky & Chantaramongkol, 2007: 1048 [type locality: Thailand, Tham Than Lod NP, 14°46'N 99°20'E, 500 m; Collection Malicky; ♂]. —Malicky 2010a: 57 [atlas; ♂].

Distribution. —Thailand.

vajrabodhi Schmid, 1958b: 53 [type locality: [Sri Lanka], Ceylan, Kitulgala (Sab., 750 ft) 2-III, Kelani Ganga, belle rivière coulant dans une vallée étroite et boisée, à la sortie des montagnes; depository not designated; ♂]. —Oláh and Johanson 2010: 79 [distribution].

Distribution. —India, Sri Lanka.

Genus *Stactobia* McLachlan, 1880

Stactobia McLachlan, 1880: 505, 517 [type species: *Hydroptila fuscicornis* Schneider, 1845, subsequent designation by Mosely 1933: 162]. —Schmid 1959a: 1 [generic review]. —Kumanski 1979: 4 [key to species of Bulgaria]. —Marshall 1979b: 165 [generic review]. —Botosaneanu 1992: 41 [key to species in the Levant]. —Tobias 1999: 49 [distributional records; larval abundance]. —Malicky and Chantaramongkol 2007: 1042 [diagnostic characters of adults]. —Malicky 2013: 43 [possible senior synonym to *Plethus*]. —Lodovici and Valle 2013: 161 [review of Italian species]. —Ito 2017c: 201 [review of Japanese species].

Afrित्रichia Mosely, 1939d: 35 [type species: *Afrित्रichia aurea* Mosely, 1939d, original designation]. —Schmid 1959a: 56 [to synonymy].

Aratrित्रichia Mosely, 1948b: 76 [type species: *Aratrित्रichia fahjia* Mosely, 1948b, original designation]. —Schmid 1959a: 51 [to synonymy].

Lamonganotrichia Ulmer, 1951: 68 [type species: *Lamonganotrichia crassa* Ulmer, 1951, original designation]. —Marshall 1979b: 165 [to synonymy].

The genus *Stactobia* presently consists of 164 species and occurs in Southeast Asia, Africa, and in a general Palearctic distribution. While *Stactobia* is one of the more successful hydroptilid genera in terms of species and abundance of individuals, it does not exhibit the broad geographical range of genera such as *Hydroptila* or *Oxyethira* (Marshall 1979b). Vaillant (1956) contributed most to knowledge of the biology of the genus, while Danecker (1961) gave a detailed life history. Marshall (1979b) hypothesized that its complete absence from the Neotropical faunal region may be attributable to two potential factors: the typically slow rate of dispersal of montane-stream dwellers compared with the faster rate of dispersal of lowland vegetation dwellers and competition with the members of the highly successful subfamily Leucotrichiinae. The six species groups (*furcata*, *martynovi*, *nielsenii*, *vallanti*, *bolzei*, and *japonica*) outlined by Marshall (1979b) followed those of Schmid (1959a) and Jacquemart (1973). The madicolous larvae live in thin sheets of water situated close to running-water habitats and can be found on rock surfaces near streams and (the sometimes nearly vertical) faces of waterfalls (Hynes 1970; Marshall 1979b). Larval adaptations, required by the habitat, include dorso-ventral flattening, heavily sclerotized and fused tergites, and short, robust legs used for clinging (Marshall 1979b).

aibel Malicky, 2012: 1267 [type locality: China, Setschuan, Qingyin Pavilion, Jingshui, Emei Shan, 180 km SW Chengdu, 800–1200 m; Collection Malicky; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

alaplica Sipahiler, 2012b: 1052 [type locality: Turkey, Zonguldak, Alapli, Gümeli, Bölüklü Yaylasi direction, 40°04'N 31°39'E, 690 m; HUAT; ♂; ♀].

Distribution. —Turkey.

algira Vaillant, 1951: 17 [type locality: [Algeria]; depository not designated; ♂]. —Schmid 1959a: 32 [♂]. —Malicky 1983b: 65 [atlas; ♂]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Algeria.

alpina Bertuetti, Lodovici, & Valle, 2004: 25 [type locality: [Italy], Piemonte, Provincia di Cuneo, Garessio m 650, affl. fiume Tanaro c/o Trappa; MBCG; ♂]. —Schmid 1959a: 32 [♂]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548 [checklist]. —Cianficconi et al. 2007: 67 [proposed as Italian endemic]. —Lodovici and Valle 2013: 164 [distribution]. —Le Guellec et al. 2013: 35 [distribution].

Distribution. —France, Italy.

aoualina Botosaneanu & Dia in Dia and Botosaneanu 1983: 127 [type locality: [Lebanon], Station 6, Nabaa Aazibi, source alimentant l'affluent Nahr Aaray (torrent Jezzîne) du Nahr el Aouali, il s'agit plutôt d'un complexe de deux sources, réocrène et limnocrène, Massif de Niha, 900 m; ZMUA; ♂]. —Botosaneanu 1992: 45 [♂, ♀]. —Malicky 2004a: 74 [atlas]. —Malicky 2005b: 548 [checklist]. —Dia 2015: 51 [distribution].

Distribution. —Lebanon.

atra (Hagen, 1864a): 825 [type locality: locality not given; depository not designated; description not provided; in *Hydroptila*]. —Hagen 1865a: 218 [morphological description; sex unknown]. —Hagen 1865b: 77 [as new species; [Portugal] Madeira; NHMUK; description; sex unknown abdomen missing]. —Eaton 1873: 142 [revision; to *Orthotrichia*]. —McLachlan 1880: 520 [revision]. —McLachlan 1884: 71 [distribution; to *Stactobia*]. —Morton 1893: 78 [distribution; ♂]. —Nybom 1948: 6 [♂; distribution]. —Schmid 1952: 655 [distribution]. —Schmid 1959a: 31 [♂]. —Nybom 1963: 114 [distribution]. —Nybom 1965: 90 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist; possible senior synonym of *S. nybomi*]. —Malicky 1983b: 65 [atlas; ♂]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548 [checklist]. —Hughes 2006: 29 [biology].

Distribution. —Portugal, Spain.

aurea (Mosely, 1939d): 35 [type locality: [Uganda], Ruwenzori, Namwamba Valley, 6500 ft.; NHMUK; ♂]. —Kimmins 1959: 56 [checklist]. —Schmid 1959b: 6 [species review]. —Johanson 1992: 118 [checklist]. —Wells and Andersen 1995: 145 [checklist]. —Mey 2007: 228 [wing venation].

Distribution. —Uganda.

bademli Sipahiler, 2003b: 31 [type locality: [Turkey], Beysehir, Yenisarbademli, direction to Aksu, 5. km, 1350 m, 37°50'N, 31°19'E; depository not designated; ♂]. —Malicky 2004a: 79 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 397 [distribution].

Distribution. —Turkey.

balin Schmid, 1983: 244 [type locality: [India], Bengale occidental, Shepi; CNC; ♂]. —Lonsdale 2020: 32 [holotype depository].

Distribution. —India.

ballur Schmid, 1983: 244 [type locality: [India], Assam, United Jaintia and Khasi Hills, Borghat; CNC; ♂]. —Lonsdale 2020: 32 [holotype depository].

Distribution. —India.

banra Oláh, 1989: 259 [type locality: Vietnam, Ha Son Binh Province, Hoa Binh; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Vietnam.

beatensis Mosely, 1934b: 441 [type locality: France, Haut-Garonne, St.-Béat; NHMUK; ♂]. —Schmid 1952: 653 [distribution]. —Schmid 1959a: 16 [♂]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —Malicky 1983b: 64 [atlas; ♂]. —Cianficconi et al. 1999: 277 [distribution]. —Valle 2001: 64 [distribution]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Le Guellec 2011: 27 [distribution]. —Corallini and Cianficconi 2011: 628 [checklist]. —Lodovici and Valle 2013: 164 [♀; distribution]. —Martín et al. 2015: 74 [distribution].

Distribution. —France, Italy, Spain.

beor Schmid, 1983: 280 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Dirang Dzong; CNC; ♂]. —Lonsdale 2020: 32 [holotype depository].

Distribution. —India.

beren Schmid, 1983: 272 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Gigaon; CNC; ♂]. —Lonsdale 2020: 33 [holotype depository].

Distribution. —India.

bersisik Wells, 1993: 353 [type locality: [Indonesia] Bali, Bali Barat, Sg. Pancoseming, N of Batuangung, near Negara; NTM; ♂]. —Wells and Malicky 1997: 175 [distribution]. —Malicky 2010a: 55 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92: [distribution].

Distribution. —Indonesia.

betiri Wells & Malicky, 1997: 175 [type locality: [Indonesia] East Java, Meru Betiri; ANIC; ♂]. —Malicky 2010a: 53 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

bienda Oláh, 1989: 255 [type locality: Vietnam, Cucphuong, 400 m a.s.l.; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 58 [atlas; ♂].

Distribution. —Vietnam.

bifur Schmid, 1983: 268 [type locality: [India], Assam, United Jaintia and Khasi Hills, Umlangshor; CNC; ♂]. —Lonsdale 2020: 33 [holotype depository].

Distribution. —India.

bofur Schmid, 1983: 269 [type locality: [India], Assam, Manipour, Litan; CNC; ♂]. —Lonsdale 2020: 33 [holotype depository].

Distribution. —India.

bolzei Jacquemart, 1965: 8 [type locality: [Turkey] 5 km avant Gümüsane, St. 149; IRSNB; ♂; larva]. —Malicky 2005b: 548 [checklist].

Distribution. —Turkey.

botvaz Oláh & Johanson, 2010a: 83 [type locality: Brunei, Belait district, 1.5 km on path to Bukit Teraja, small stream, 5 km N Kg. Teraja, 4°19'15"N 114°26'24"E; NHRS; ♂].

Distribution. —Brunei.

calin Schmid, 1983: 276 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Chug; CNC; ♂]. —Malicky and Chantaramongkol 2007: 1046 [distribution]. —Mattern 2015: 502 [distribution]. —Lonsdale 2020: 33 [holotype depository].

Distribution. —India, Nepal.

campire Ito, 2017c: 225 [type locality: [Japan], Ryukyu Islands, Iriomote-jima, Urauchigawa, Kampire-no-taki, 24°21'17"N, 123°48'28"E, 83 m; CBM-ZI; ♂; larva].

Distribution. —Japan.

caspersi Ulmer, 1950: 296 [type locality: [Bulgaria], Stüßwassergerinnsel am Steilufer dre Warnaer Bucht (Schwarzes Meer); ZMUH; ♂; larva]. —Malicky 1983b: 62 [atlas; ♂]. —Kumanski 1985: 110 [♂]. —Botosaneanu 1956: 366 [larva]. —Schmid 1959a: 20 [♂]. —Botosaneanu 1967: 293 [distribution]. —Malicky 1974: 122 [checklist]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Kumanski 1979: 4 [♂; distribution]. —Moretti and Cianficconi 1981: 200 [checklist]. —Kumanski 1985: 110 [♂]. —Botosaneanu 1992: 42 [♂; ♀]. —Dallai and Afzelius 1995: 166 [sperm structure]. —Sipahiler 1998: 11 [distribution]. —Cianficconi et al. 1999: 57 [distribution]. —Valle 2001: 64 [distribution]. —Cianficconi et al. 2004: 329 [distribution]. —Malicky 2004a: 75 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 397 [distribution]. —Cianficconi et al. 2005: 96 [habitat; distribution]. —Malicky 2005a: 68 [distribution]. —Cianficconi et al. 2007: 569, 575 [distribution]. —Ujvárosi et al. 2008: 113 [checklist]. —Ivanov 2011: 196 [checklist]. —Waringer and Graf 2011: 280 [larval synopsis]. —Lodovici and Valle 2013: 165 [♀; distribution]. —Dia 2015: 51 [distribution].

—*eretzi* Botosaneanu & Gasith, 1971: 96 [type locality: [Israel], en Avdat; TAU; ♂]. —Botosaneanu and Malicky 1978: 340 [to synonymy].

Distribution. —Bulgaria, Greece, Israel, Italy, Lebanon, Romania, Turkey.

cataphanes Mey, 1998a: 551 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuaganon range, 1050 m; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

cermikensis Sipahiler, 1998: 9 [type locality: Turkey, Artvin, Savsat, Çermik Mahallesi, direction Lekoban yaylasi, 1800 m, 42°07'N, 41°35'E; depository not designated; ♂]. —Malicky 2004a: 79 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 397 [distribution]. —Sipahiler 2008: 99 [checklist].

Distribution. —Turkey.

chichibu Ito, 2017c: 219 [type locality: [Japan], Honshu, Saitama, Chichibu-shi, Otaki, Tochimoto, small stream, 35°56'N, 138°51'E, 670 m; CBM-ZI; ♂; larva].

Distribution. —Japan.

cianficconiae Lodovici & Valle, 2013: 167 [type locality: [Italy], Sardegna, Nuoro, hygropetric road Gavoi-Ovodda; CMOR; ♂].

Distribution. —Italy.

crassa (Ulmer, 1951): 69 [type locality: [Indonesia], Java, starke Rheokrene am See Lamongan; ZMUH; ♂; in *Lamonganotrichia*]. —Malicky 2010a: 55 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

culasi Wells & Mey, 2002: 119 [type locality: [Philippines] Panay, Culasi, San Vicente, 400 m; ZMHB; ♂].

Distribution. —Philippines.

dain Schmid, 1983: 280 [type locality: [India], Assam, United Jaintia and Khasi Hills, Mawkap; CNC; ♂]. —Lonsdale 2020: 33 [holotype depository].

Distribution. —India.

darvazica Ivanov, 1992: 231 [type locality: [Tajikistan], Pamir, Darvaz, brook above kishlak Kalai-Khumb along the river Pyandzh; ZIN; ♂].

Distribution. —Tajikistan.

distinguenda Botosaneanu & Nozaki, 1996: 61 [type locality: [Japan], Honshu, Gifu, Otohime-buchi, Shimono, Fukuoka-cho; CBM-ZI; ♂]. —Tanida and Kuranishi 2016: 73 [checklist]. —Ito 2017c: 217 [♂; distribution]. —Ito and Shimura 2019: 35 [larva; distribution].

Distribution. —Japan.

doehleri Schmid, 1959a: 46 [type locality: Pakistan septentrional, Katzarah Tso; CNC; ♂]. —Schmid, 1958c: 220 [as new species, *nomen nudum*; distribution]. —Lonsdale 2020: 33 [holotype depository].

Distribution. —Pakistan.

dori Schmid, 1983: 272 [type locality: [India], Uttar Pradesh, Rishikesh; CNC; ♂]. —Lonsdale 2020: 33 [holotype depository].

Distribution. —India.

durin Schmid, 1983: 252 [type locality: [India], Bengale occidental, Shepi; CNC; ♂]. —Lonsdale 2020: 34 [holotype depository].

Distribution. —India.

dwalin Schmid, 1983: 246 [type locality: [India], Pauri Garhwal, Hanuman Chatti; CNC; ♂]. —Lonsdale 2020: 34 [holotype depository].

Distribution. —India.

dwalur Schmid, 1983: 244 [type locality: [India], Bengale occidental, Dilpa; CNC; ♂]. —Lonsdale 2020: 34 [holotype depository].

Distribution. —India.

eatoniella McLachlan, 1880: 517 [type locality: France, Switzerland; NHMUK; ♂]. —Klapálek 1900a: 73 [♂; larva]. —Klapálek 1900b: 3 [♂; larva; distribution]. —Thienemann 1904b: 261 [larva]. —Kimmins 1949: 232 [holotype selected]. —Schmid 1952: 653 [distribution]. —Schmid 1959a: 33 [♂]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —Malicky 1983b: 64 [atlas; ♂]. —Cianficconi et al. 1999: 57 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 76 [atlas]. —Malicky 2005b: 548 [checklist]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Robert 2007: 82 [distribution]. —González and Mendéndez 2011: 119 [distribution]. —Waringer and Graf 2011: 280 [larval synopsis]. —Lodovici and Valle 2013: 167 [♀; distribution].

—*oredonensis* Mosely, 1934b: 443 [type locality: France, Haut-Garonne, St.-Béat; NHMUK; ♂]. —Kimmins 1949: 232 [to synonymy]. —Vaillant 1951: 16 [♂; wings].

Distribution. —Austria, France, Germany, Italy, Slovenia, Spain, Switzerland.

ericae Malicky, 1981b: 337 [type locality: [Italy], Sardinien, Bach südwestlich von Gairo; Collection Malicky; ♂]. —Malicky 1983b: 65 [atlas; ♂]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548 [checklist]. —Cianficconi et al. 2007: 67 [proposed as Italian endemic]. —Lodovici and Valle 2013: 169 [distribution].

Distribution. —Italy.

extensor Wells & Mey, 2002: 121 [type locality: [Philippines] Panay, San Renminigio, Aningalan; ZMHB; ♂].

Distribution. —Philippines.

fahija (Mosely, 1948b): 76 [type locality: [Yemen], Western Aden Protectorate, Jebel Jihaf, Wadi Leje, beside waterfalls; NHMUK; ♂; in *Aratrachia*]. —Schmid 1959a: 51 [species review]. —Botosaneanu 1973: 66 [taxonomic note]. —Malicky 1983b: 66 [atlas; ♂]. —Botosaneanu 1992: 42 [♂, comparison with *S. pacatoria*]. —Malicky 2004a: 74 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Yemen.

fethiyensis Sipahiler, 1989: 132 [type locality: Turkey, Mugla, Fethiye, 10 km to Köycegiz, 29°02'N, 36°45'E; depository not designated; ♂]. —Malicky 2004a: 79 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 397 [distribution].

Distribution. —Turkey.

filacea Mey, 2003b: 428 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

fischeri Schmid, 1958b: 49 [type locality: [Sri Lanka], Ceylan, Nuwara Eliya (C. P.) 26-II, cours supérieur de la Nanu Oya, petite rivière rapide, sur lit caillouteux, 6000 ft; depository not designated; ♂]. —Schmid 1959a: 44 [as new species, ♂].

Distribution. —Sri Lanka.

forcipata Zhou, Yang, & Morse, 2013: 278 [type locality: China, Sichuan Province, Du-jiang-yan City, Guan County, 6 km W of Guan County Seat, Bai-sha River, 103.37°E 31.00°N, 780 m; NAUJ; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

forsslundi Schmid, 1959a: 40 [type locality: [Iran septentrional, Waliabad; CNC; ♂]. —Schmid 1959b: 693 [distribution]. —Malicky 1983b: 63 [atlas; ♂]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2012b: 1054 [distribution]. —Lonsdale 2020: 34 [holotype depository].

Distribution. —Iran, Turkey.

freyi Nybom, 1948: 8 [type locality: [Spain], Grand Canary; MZHF; ♂]. —Schmid 1959a: 27 [♂]. —Malicky 1983b: 63 [atlas; ♂]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Spain.

froki Schmid, 1983: 276 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Lifakpo; CNC; ♂]. —Lonsdale 2020: 34 [holotype depository].

Distribution. —India.

furcata Mosely, 1930a: 180 [type locality: [France], Corsica, Corte; NHMUK; ♂]. —Mosely 1932: 176 [♂; distribution]. —Schmid 1959a: 13 [♂]. —Schmid 1952: 653 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —Malicky 1983b: 64 [atlas; ♂]. —Malicky 2004a: 76 [atlas]. —Malicky 2005b: 548 [checklist]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Waringer and Graf 2011: 280 [larval synopsis]. —Lodovici and Valle 2013: 169 [♀; distribution].

Distribution. —France, Italy, Portugal, Spain.

fuscicornis (Schneider, 1845): 346 [type locality: [Italy], Sicily, Messina; depository not designated; ♂; in *Hydroptila*]. —Eaton 1873: 137 [♂; distribution; as *Phrixocoma*]. —McLachlan 1880: 517 [revision; ♂; to *Stactobia*]. —McLachlan 1884: 72 [distribution]. —Ris 1897: 418 [♂; distribution]. —Ris 1903: 17 [distribution]. —Kimmins 1949: 229 [♂; revision; distribution]. —Schmid 1959a: 26 [♂]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —Malicky 1983b: 62, 65 [atlas; ♂]. —Cianficconi et al. 1999: 277 [distribution]. —Malicky 2005b: 548 [checklist]. —Corallini and Cianficconi 2011: 628 [checklist]. —Lodovici and Valle 2013: 171 [♂; ♀; distribution]. —Valle and Lodovici 2018: 147 [distribution]. —*obscura* (Kolenati, 1848): 106 [type locality: [Italy], Sicily, Messina; probably NHMW; probably ♂; in *Hydroptila*]. —Hagen 1864a: 825 [to synonymy].

Distribution. —France, Germany, Italy, Portugal, Switzerland.

germani Malicky, Ivanov, & Melnitsky, 2011: 1493 [type locality: [Indonesia], Lombok, Kembangkuning, 2 km N Kotaraja, 490 m, 8°33'33"S, 116°25'22"E; ZIN; ♂; in *Scelotrichia*]. —Malicky et al. 2014a: 6 [distribution]. —Malicky et al. 2016: 92 [distribution].

Distribution. —Indonesia.

gerutu Wells & Huisman, 1993: 102 [type locality: East Malaysia, Sabah, Sapon Falls, 10 km S of Tenom; NTM; ♂]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Malaysia.

gimli Schmid, 1983: 248 [type locality: [India], Pauri Garhwal, Akhrotkoti; CNC; ♂]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —India.

gloin Schmid, 1983: 278 [type locality: [India], Teri Garhwal, Pau Kal; CNC; ♂]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —India.

gomerina Botosaneanu, 1981b: 188 [type locality: [Spain] Canary Islands, Gomera, Bosque de El Cedro; ZMUA; ♂]. —Malicky 1983b: 63 [atlas; ♂]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Spain.

gozmanyi Mey, 2007: 225 [type locality: Ethiopia, Simien Mts., Jinbar River, 38°05'E, 13°15'N, ca. 3400 m; ZMHB; ♂].

Distribution. —Ethiopia.

grolin Schmid, 1983: 278 [type locality: [India], Assam, United Jaintia and Khasi Hills, Pynter; CNC; ♂]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —India.

gunma Ito, 2017c: 216 [type locality: [Japan], Honshu, Gunma, Minakami-shi, Okutone, Hidarimata-zawa, 36°48'N, 139°00'E; CBM-ZI; ♂].

Distribution. —Japan.

gwili Schmid, 1983: 248 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Nyukmadong; CNC; ♂]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —India.

hattorii Botosaneanu & Nozaki, 1996: 56 [type locality: [Japan], Honshu, Shizuoka, Tokusa, Oi-gawa, ca. 1200 m, Akaishi Mts., Shiauoka-shi; CBM-ZI; ♂]. —Tanida and Kuranishi 2016: 73 [checklist]. —Ito 2017c: 215 [♂; distribution].

Distribution. —Japan.

huor Schmid, 1983: 266 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Lungdur; CNC; ♂]. —Lonsdale 2020: 35 [holotype depository].

Distribution. —India.

hurin Schmid, 1983: 264 [type locality: [India], Pauri Garhwal, Dhur; CNC; ♂]. —Malicky and Chantaramongkol 2007: 1046 [distribution]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —India.

inexpectata Botosaneanu & Nozaki, 1996: 55 [type locality: [Japan], Honshu, Kanagawa, Harutake-sawa, 480 m, Minoge, Hadano-shi; CBM-ZI; ♂]. —Tanida and Kuranishi 2016: 73 [checklist]. —Ito 2017c: 213 [♂; larva; distribution].

Distribution. —Japan.

intermedia González & Terra, 1981: 203 [type locality: [Spain], Ferreirós de Abaixo (Lugo), Serra do Caurel, Río de Ferreirós, alt. 600 m; USCM; ♂]. —Malicky 1983b: 65 [atlas; ♂]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548

[checklist]. —González and Menéndez 2011: 119 [distribution]. —Martín et al. 2014: 72 [distribution].

Distribution. —Portugal, Spain.

jacquemarti Malicky, 1977: 67 [type locality: [Greece], Kreta, Samaria-Schlucht; Collection Malicky; ♂]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 62 [atlas; ♂]. —Kumanski 1985: 106 [♂]. —Malicky 2004a: 75 [atlas]. —Malicky 2005b: 548 [checklist; treated as distinct species]. —Sipahiler 2005: 397 [distribution]. —Malicky 2005a: 69 [distribution]. —Sipahiler 2007: 38 [distribution].

Distribution. —Greece, Turkey.

japonica Iwata, 1930: 63 [type locality: [Japan]; no holotype designated; larva]. —Botosaneanu 1990a: 47 [larval case comparison with *S. makartschenkoi*]. —Ito et al. 1993: 142 [checklist]. —Botosaneanu and Nozaki 1996: 54 [Neotype: [Japan], Honshu, Gifu, Otohime-Buchi, Shimono, Fukuokacho; CBM-ZI; ♂; distribution]. —Tanida and Kuranishi 2016: 73 [checklist]. —Ito 2017c: 208 [Lectotype: [Japan], Honshu, Gifu, Fukuoka-mura (present address Nakatsugawashi, boundary of Shimono and Fukuoka), Otohime-taki Fall, 35°34'35"N, 137°27'53"E, 375 m; KUM; ♂; larva; distribution].

Distribution. —Japan.

kanagawa Ito, 2017c: 208 [type locality: [Japan], Honshu, Kanagawa, Yugawara-machi, Makuyama, Niizaki-gawa, 35°10'02"N, 139°5'18"E, 200 m; CBM-ZI; ♂; larva].

Distribution. —Japan.

kaputensis Wells & Andersen, 1995: 147 [type locality: Tanzania, Tanga region, West Usambara Mts, Mazumbai, Kaputu Stream, loc. 9, 1450 m a.s.l; ZMUB; ♂].

Distribution. —Tanzania.

keluk Wells, 1993: 354 [type locality: [Indonesia], Bali, Tributary of Yeh Balian, nr Batungsel on Antosari - Pengastulan Road; NTM; ♂]. —Wells and Malicky 1997: 175 [distribution]. —Malicky 2010a: 55 [atlas; ♂]. —Malicky et al. 2014a: 6 [distribution].

Distribution. —Indonesia.

kimminsi Schmid, 1959a: 15 [type locality: Iran septentrional, Meyur; CNC; ♂]. —Schmid 1959b: 692 [distribution]. —Malicky 1983b: 64 [atlas; ♂]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 76 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 397 [checklist; distribution]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —Iran, Turkey.

kiziroglui Sipahiler, 2012b: 1053 [type locality: Turkey, Izmir, Salihli, Birgi direction, 21 km Bozdag; HUAT; ♂].

Distribution. —Turkey.

klapaleki Schmid, 1959a: 37 [type locality: Pakistan septentrional, Chhantir Gah; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Schmid 1983: 250 [distribution]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —India, Pakistan.

klongpod Malicky, Suwannarat, & Laudee, 2018: 1320 [type locality: Thailand, Klong Pod an der Grenze des Kao Nan Nationalparks, 8°48'N, 99°34'E; Collection Malicky; ♂].

Distribution. —Thailand.

kudung Wells & Huisman, 1993: 102 [type locality: West Malaysia, Cameron Highlands, “40 mile” falls, between Tanah Rata and Tapah; NTM; ♂]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Malaysia.

kyria Malicky, 2004b: 296 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), von hygropetrischen Stellen entlang der Straße bei Babai Bazar; Collection Malicky; ♂]. —Malicky 2006: 253 [checklist]. —Mattern 2015: 502 [distribution].

Distribution. —Nepal.

lavitra Oláh & Johanson, 2010a: 85 [type locality: Malaysia, Sabah, Tawau, Maliau Basin, Tributary to Maliau River, 4°44'32.1"N 116°58'14.4"E, 220 m; NHRS; ♂].

Distribution. —Malaysia.

lekoban Sipahiler, 1998: 9 [type locality: Turkey, Artvin, Savsat, Çermik Mahallesi, direction Lekoban yaylasi, 1800 m, 42°07'N, 41°35'E; depository not designated; ♂]. —Malicky 2004a: 79 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 397 [distribution]. —Sipahiler, 2008: 99 [checklist].

Distribution. —Turkey.

leptoclada Zhou, Yang, & Morse, 2013: 282 [type locality: China, Jiangxi Province, Wu-yuan County, 75 km N of Wu-yuan County Seat, Qing-hua River, 17.51°E, 29.15°N, 250 m; NAUJ; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

livadia Malicky, 1984: 98 [type locality: Greece, Insel Serifos, 5 km westlich der Stadt Serifos; Collection Malicky; ♂]. —Malicky 2004a: 76 [atlas]. —Malicky 2005b: 548 [checklist]. —Malicky 2005a: 69 [distribution].

Distribution. —Greece.

loki Schmid, 1983: 281 [type locality: [India], Teri Garhwal, Pau Kal; CNC; ♂]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —India.

loni Schmid, 1983: 278 [type locality: [India], Assam, United Jaintia and Khasi Hills, Mawpran; CNC; ♂]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —India.

maculata Vaillant, 1951: 17 [type locality: [Algeria]; depository not designated; ♂]. —Schmid, 1959a: 24 [♂]. —Moretti and Cianficconi 1981: 200 [checklist]. —Lodovici and Valle 2013: 172 [♂; ♀; distribution].

Distribution. —Algeria, Italy.

makartschenkoi Botosaneanu & Levanidova, 1988: 169 [type locality: [Russia], Kunashir Island (southernmost of the Kuril Islands), Tyurino River at Sernovodsk; IBSS-RAS; ♂; larva]. —Botosaneanu 1990a: 47 [larval case comparison with Japanese species]. —Botosaneanu and Bozaki 1996: 55 [distribution]. —Chuluunbat and Morse 2007: 54 [distribution]. —Ivanov 2011: 196 [checklist]. —Tanida and Kuranishi 2016: 73 [checklist]. —Chuluunbat et al. 2016: 102 [distribution]. —Potikha and Vshivkova 2016: 364 [distribution]. —Ito 2017c: 203 [♂; ♀; larva; distribution].

Distribution. —Japan, Mongolia, Russia.

malacantosa Schmid, 1952: 653 [type locality: Spain; CNC; ♂]. —Schmid 1959a: 23 [♂]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Malicky 1983b: 64 [atlas; ♂]. —Malicky 2004a: 76 [atlas]. —Malicky 2005b: 548 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Lonsdale 2020: 36 [holotype depository].

Distribution. —Spain.

malickyi Mey, 1981: 56 [type locality: [China], Tschatkalski Chrebet, bei Kumyschkan (Nord-westlicher Tianshan); NMPG; ♂]. —Malicky 1983b: 62 [atlas; ♂]. —Spuris 1989: 18 [checklist]. —Malicky 2004a: 75 [atlas]. —Malicky 2005b: 548 [checklist]. —Küçükbasmaci and Canbulat 2020: 114 [distribution].

Distribution. —China, Kyrgyzstan, Russia.

manicata Wells & Mey, 2002: 119 [type locality: [Philippines] Negros, Patag NR, 750 m; ZMHB; ♂].

Distribution. —Philippines.

mangyanica Mey, 1995: 193 [type locality: [Philippines], Mindoro, Calamintao, Bach zum Paghbahan-Fluß; Collection Mey; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

margalitana Botosaneanu, 1974: 168 [type locality: [Israel], Nahal Arugot, ruisseau près de En Gedi au bord de la Mer Morte; TAU; ♂]. —Malicky 1983b: 63 [atlas; ♂]. —Botosaneanu 1992: 44 [♂]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Isra

marlieri Schmid, 1959a: 43 [type locality: Iran septentrional, Polur; CNC; ♂]. —Schmid 1959b: 692 [distribution]. —Malicky 1983b: 63 [atlas; ♂]. —Sipahiler and Malicky 1987: 129 [distribution]. —Mirmoayedi and Malicky 2002: 164 [distribution]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 398 [distribution]. —Chvojka 2006: 253 [distribution]. —Lonsdale 2020: 37 [holotype depository].

Distribution. —Iran, Turkey.

martynovi Schmid, 1959a: 36 [type locality: Pakistan septentrional, Lulu Sar; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*]. —Malicky and Chantaramongkol 2007: 1046 [distribution]. —Mattern 2015: 502 [distribution]. —Malicky 2018: 49 [checklist]. —Lonsdale 2020: 37 [holotype depository].

Distribution. —India, Nepal, Pakistan.

mayeri Schmid, 1959a: 41 [type locality: Iran nord-oriental, Bavaman; CNC; ♂]. —Schmid 1959b: 693 [distribution]. —Malicky 1983b: 63 [atlas; ♂]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist]. —Lonsdale 2020: 37 [holotype depository]. —*decosteri* Jacquemart, 1965: 6 [type locality: [Turkey] 25 km avant Giresum, St. 158; IRSNB; ♂]. —Schmid 1983: 282 [to synonymy].

Distribution. —Iran, Turkey.

maclachlani Kimmins, 1949: 232 [type locality: France, Cantal, Le Lioran; NHMUK; ♂]. —Schmid 1959a: 17 [♂]. —Schmid 1952: 652 [distribution; as *maclachlani*]. —Botosaneanu 1967: 293 [distribution; as *maclachlani*]. —Spuris 1972: 19, 27 [checklist; as *maclachlani*]. —Botosaneanu and Malicky 1978: 340 [checklist; as *maclachlani*]. —Kumanski 1979: 4 [♂; distribution]. —Malicky 1983b: 64 [atlas; ♂; as *maclachlani*]. —Kumanski 1985: 108 [♂]. —Malicky 2004a: 76 [atlas]. —Malicky 2005b: 548 [checklist; as *maclachlani*]. —Sipahiler 2005: 398 [distribution; as *maclachlani*]. —Malicky 2005a: 69 [distribution; as *maclachlani*]. —Robert 2007: 82 [checklist]. —Ujvárosi et al. 2008: 113 [checklist; as *maclachlani*]. —Martínez Menéndez and González 2010: 341 [distribution; as *maclachlani*]. —González and Menéndez 2011: 119 [distribution]. —Waringer and Graf 2011: 280 [larval synopsis]. —Coppa 2013: 123–132 [distribution; as *maclachlani*]. —Chvojka et al. 2016: 44 [distribution].

—*botosaneanui* Schmid, 1959a: 19 [type locality: [Macedonia], Yougoslavie (Macédoine) Perister; CNC; ♂]. —Botosaneanu 1967: 293 [as synonym]. —Botosaneanu and Malicky 1978: 340 [to synonymy]. —Lonsdale 2020: 33 [holotype depository].

—*delamarei* Coineau & Jacquemart, 1961: 540 [type locality: [France], Pyrénées-Orientales; depository not designated; ♂; ♀; larva]. —Jacquemart and Coineau 1962: 3 [checklist]. —Botosaneanu 1967: 293 [as synonym]. —Botosaneanu and Malicky 1978: 340 [to synonymy].

Distribution. —Bulgaria, Czech Republic, France, Germany, Greece, Macedonia, Portugal, Romania, Spain, Turkey.

mindorica Mey, 1995: 193 [type locality: [Philippines], Mindoro, Paluan, Calawagan-Fluß; Collection Mey; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

miresa Mey, 1998a: 552 [type locality: [Philippines, Mindanao], northern slope of Mt. Atuuganon range, 1050 m, hygropetric site; ZMHB; ♂]. —Wells and Mey 2002: 134 [checklist].

Distribution. —Philippines.

monnioti Jacquemart, 1963d: 1 [type locality: Cyprus, Bains d'Aphrodite sur one paroi suintante; IRSNB; larva]. —Jacquemart 1973: 3 [♂; ♀; comment on larva]. —Malicky 2005b: 548 [checklist; note on ♂ description in Jacquemart 1973].

Distribution. —Cyprus, Greece.

morettii Schmid, 1959a: 49 [type locality: Pakistan septentrional, Kawai; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Schmid 1983: 281 [distribution]. —Lonsdale 2020: 37 [holotype depository].

Distribution. —India, Pakistan.

moselyi Kimmins, 1949: 232 [type locality: France, Isère, Bourg d'Oisans; NHMUK; ♂]. —Schmid 1959a: 22 [♂]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —Malicky 1983b: 65 [atlas; ♂]. —Cianficconi et al. 1999: 57 [distribution]. —Cianficconi et al. 1999: 277 [distribution]. —Urbanič 2004: 51 [distribution]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548 [checklist]. —Cianficconi et al. 2005: 96 [habitat; distribution]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Robert 2007: 82 [checklist]. —Cianficconi et al. 2007: 569, 575 [distribution]. —Waringer and Graf 2011: 280 [larval synopsis]. —Lodovici and Valle 2013: 173 [♀; distribution]. —Corallini and Cianficconi 2011: 628 [checklist].

Distribution. —Austria, France, Germany, Italy, Slovenia.

naili Schmid, 1983: 270 [type locality: [India], Bengale occidental, Dilpa; CNC; ♂]. —Lonsdale 2020: 37 [holotype depository].

Distribution. —India.

nalin Schmid, 1983: 280 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Lungdur; CNC; ♂]. —Malicky and Chantaramongkol 2007: 1046 [distribution]. —Malicky 2010a: 55 [atlas; ♂]. —Lonsdale 2020: 37 [holotype depository].

Distribution. —India, Thailand.

nielsenii Schmid, 1959a: 50 [type locality: Iran, Zanuz (Ost. 2); CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*]. —Schmid 1983: 270, 283 [checklist]. —Malicky 1983b: 62 [atlas; ♂]. —Mirmoayedi and Malicky 2002: 164 [checklist]. —Malicky 2004a: 75 [atlas]. —Malicky 2005b: 548 [checklist]. —Lonsdale 2020: 38 [holotype depository].

Distribution. —Iran.

nishimotoi Botosaneanu & Nozaki, 1996: 58 [type locality: [Japan], Honshu, Aichi, Shimada-gawa, a tributary of Kansa-gawa, Horai-cho; CBM-ZI; ♂]. —Tanida and Kuranishi 2016: 73 [checklist]. —Ito 2017c: 216 [♂; distribution]. —Park et al. 2018: 108 [♂; distribution]. —Park and Kong 2020: 298 [checklist].

Distribution. —Japan, Korea.

noldi Schmid, 1983: 256 [type locality: [India], Kumaon, Loharket; CNC; ♂]. —Lonsdale 2020: 38 [holotype depository].

Distribution. —India.

nori Schmid, 1983: 274 [type locality: [India], Pauri Garhwal, Pau Kal; CNC; ♂]. —Malicky 2006: 253 [checklist; distribution]. —Mattern 2015: 502 [distribution]. —Lonsdale 2020: 38 [holotype depository].

Distribution. —India, Nepal.

nybomi Schmid, 1959a: 29 [type locality: [Portugal], Madère, Ribera Brava; MZHF; ♂]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [possible junior synonym of *S. atra*, checklist]. —Malicky 1983b: 65 [atlas; ♂]. —Malicky 2004a: 77 [atlas]. —Malicky 2005b: 548 [checklist]. —Hughes 2006: 29 [biology].

Distribution. —Portugal.

oin Schmid, 1983: 256 [type locality: [India], Pauri Garhwal, Rudraprayag; CNC; ♂]. —Lonsdale 2020: 38 [holotype depository].

Distribution. —India.

olgae Martynov, 1927: 177 [type locality: [Uzbekistan?], Turkestan, River Tchimganka, near the Sanatory; depository not designated; ♂]. —Martynov 1934: 156 [♂]. —Mey 1978b: 28 [distribution]. —Mey 1981: 57 [♂; distribution]. —Schmid 1983: 252 [♂]. —Malicky 1983b: 62 [atlas; ♂]. —Spuris 1989: 18 [checklist]. —Malicky 2004a: 75 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Russia, Tajikistan, Uzbekistan (?).

ori Schmid, 1983: 254 [type locality: [India] Sikkim, Rhenok; CNC; ♂]. —Lonsdale 2020: 38 [holotype depository].

Distribution. —India.

pacatoria Dia & Botosaneanu, 1980: 369 [type locality: [Lebanon], dans un habitat madicole sur le trajet de ruisseau Ouadi Ras el Mâ, près du village Haret Jandal Ech Chouf (Liban, Chouf, bassin du Nahr Aouali: 33°38'N, 35°36'E), à une altitude de 800–900 m, dans une zone calcaire; ZMUA; ♂; larva; case]. —Malicky 1983b: 66 [atlas; ♂]. —Botosaneanu 1992: 47 [♂, ♀]. —Malicky 2004a: 74 [atlas]. —Malicky 2005b: 548 [checklist; suggestion that it should be compared to *S. fahija*]. —Dia 2015: 51 [distribution].

Distribution. —Lebanon.

parva Wells & Dudgeon, 1990: 164 [type locality: Hong Kong, Tai Po Kao Forest stream; NHMUK; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —Hong Kong.

phix Malicky & Chantaramongkol, 2007: 1045 [type locality: Bhutan, Trongsa, Telegangchhu Bridge, 27°29'N 90°31'E, 2100 m; Collection Malicky; ♂].

Distribution. —Bhutan.

plethoides Wells & Mey, 2002: 119 [type locality: [Philippines] Panay, Culasi, San Vicente, 400 m; ZMHB; ♂].

Distribution. —Philippines.

polybos Malicky & Chantaramongkol, 2007: 1045 [type locality: Bhutan, Chananachhu bei Gasekha Zam, 27°25'N 89°14'E, 2900 m; Collection Malicky; ♂].

Distribution. —Bhutan.

princesa Wells & Mey, 2002: 119 [type locality: [Philippines] Palawan, Puerto Princesa, Cayasan, Balsahan; ZMHB; ♂].

Distribution. —Philippines.

pyrrhos Malicky & Chantaramongkol, 2007: 1044 [type locality: Thailand, Doi Inthanon NP, Siribhum WF, 18°32'N 98°31'E, 1300 m; Collection Malicky; ♂]. —Malicky 2010a: 55 [atlas; ♂].

Distribution. —Thailand.

python Malicky & Chantaramongkol, 2007: 1043 [type locality: Thailand, Doi Inthanon NP, Bang Khun Klang, 98°32'E 18°32'N, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 55 [atlas; ♂]. —Mattern 2015: 502 [distribution].

Distribution. —Nepal, Thailand.

quadrispina Kimmins, 1951: 200 [type locality: [Myanmar], N.E. Burma, Kambaiti, 6300 ft.; NHRS; ♂]. —Schmid 1959a: 39 [♂]. —Wityi et al. 2015: 47 [checklist].

Distribution. —Myanmar.

quezonensis Mey, 2003b: 430 [type locality: Philippines, Luzon, Quezon province, east of Infanta, Magsaysay; ZMHB, to be transferred to either MPMP or UPLB; ♂].

Distribution. —Philippines.

radovanovici Schmid, 1959a: 53 [type locality: Pakistan, Hindou-Kouch, Khoghozi; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*]. —Schmid 1983: 274 [distribution]. —Malicky 2013: 43 [possible senior synonym to *S. schnorri*]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —India, Pakistan.

rahang Wells & Huisman, 1993: 103 [type locality: West Malaysia, Genting Highlands, stream 1.5 km below University of Malaya field station, at fall; NTM; ♂; larva; case]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Malaysia.

regularis Mey, 1996: 50 [type locality: Nord Vietnam, Okuiho, 14 km nördlich Sa Pa, am Fuße des Fan Si Pan Bergmasiv, 1100 m; ZMHB; ♂]. —Armitage et al. 2005: 28 [checklist]. —Mey 2005a: 281 [distribution]. —Malicky 2010a: 53 [atlas; ♂].

Distribution. —Vietnam.

reticulata Wells & Mey, 2002: 121 [type locality: [Philippines] Panay, San Remigio, Aningalan; ZMHB; ♂].

Distribution. —Philippines.

rhombica Zhou, Yang, & Morse, 2013: 281 [type locality: China, Sichuan Province, Zhao-jue County, Jie-fang Village, Jie-fang-gou stream, S307 at 553.0 km, 102.33°E 27.52°N, 2925 m; NAUJ; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

risiana Schmid, 1959a: 52 [type locality: Pakistan, Bélouchistan, Central Zarghun; CNC; ♂]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —Pakistan.

ruthiel Malicky & Graf, 2015: 31 [type locality: Ethiopia, Kleiner Waldbach N von Addis Abeba, 9°05'N, 38°43'E, 2800 m; Collection Malicky; ♂].

Distribution. —Ethiopia.

salmakis Malicky & Chantaramongkol, 2007: 1044 [type locality: China, Zhejiang prov., Gutien shan, 26°21'N 119°26'E, 450 m; Collection Malicky; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

schmidi Kimmins, 1964: 47 [type locality: [Nepal], Taplejung Distr., Dobhan, ca. 3,500 ft a.s.l., shady places on shrubby slope above R. Tamur; NHMUK; ♂]. —Schmid 1983: 252 [♂; distribution]. —Malicky 2006: 253 [checklist]. —Mattern 2015: 502 [distribution]. —Malicky 2018: 49 [checklist].

Distribution. —India, Nepal.

schnorri Malicky, 2004b: 296 [type locality: [Nepal, Bardia National Park], am Rande der nordindischen Ebene im Südwesten von Nepal im Bereich des ersten Hügelkammes des Himalaya (Siwalik Range), bei dem Dorf Babai Basar in der Nähe der Straße von Nepalganj nach Birendranagar, ungefähr 30 km flussaufwärts vom Lager 1 (28°21'N, 81°42'E), lag das Ufer des Babai Nadi in wenigen Metern Entfernung, vom “westlicher” Bach, 320 m; Collection Malicky; ♂]. —Malicky 2006: 253 [checklist]. —Malicky 2012: 43 [possible junior synonym of *S. radovanovici*]. —Mattern 2015: 502 [distribution].

Distribution. —Nepal.

seki Sipahiler, 2000: 26 [type locality: Turkey, Fethiye, Gelemis (Patara), Seki Çayı, 100 m; depository not designated; ♂]. —Malicky 2004a: 79 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 398 [distribution].

Distribution. —Turkey.

semele Malicky & Chantaramongkol, 2007: 1044 [type locality: Taiwan, Hsinchu co., S Chienshih, Euro, 24°39'N 121°10'E; Collection Malicky; ♂]. —Malicky 2014a: 1623 [checklist]. —Yang et al. 2016: 477 [checklist]. —Ito 2017c: 230 [♂; larva; distribution].

Distribution. —Taiwan.

shahdara Ivanov, 1992: 233 [type locality: [Tajikistan], West Pamir, Khorog, brook opposite the Botanical Garden; ZIN; ♂].

Distribution. —Tajikistan.

smoli Schmid, 1983: 270 [type locality: [India], Assam, United Jaintia and Khasi Hills, Lakadong; CNC; ♂]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —India.

snori Schmid, 1983: 260 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Nyukmadong; CNC; ♂]. —Malicky and Chantaramongkol 2007: 1046 [distribution]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —India, Nepal.

snufi Schmid, 1983: 262 [type locality: [India] Sikkim, Karponang; CNC; ♂]. —Lonsdale 2020: 39 [holotype depository].

Distribution. —India.

spicifera Zhou, Yang, & Morse, 2013: 283 [type locality: China, Sichuan Province, Wen-chuan County, 13 km S of Wen-chuan County Seat, Ban-qiao-gou stream (trib. of Min-Jiang), 103.34°E 31.28°N, 1313 m; NAUJ; ♂]. —Yang et al. 2016: 477 [checklist].

Distribution. —China.

storai Nybom, 1948: 7 [type locality: [Spain], Canary Islands; MZHF; ♂]. —Schmid 1959a: 29 [♂]. —Botosaneanu 1981b: 186 [distribution]. —Malicky 1983b: 63 [atlas; ♂]. —Botosaneanu 1993b: 160 [distribution]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Spain.

sujangsanica Kumanski, 1990: 46 [type locality: Korea, Province Hwanghe namdo (Southern Hwanghe), Sujang Mt. (a small mountain near Hedzu), below and above waterfall; SOFM; ♂; ♀]. —Arefina et al. 2002: 103 [distribution]. —Ivanov

2011: 196 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution]. —Park and Kong 2020: 298 [checklist].

Distribution. —Korea, Russia.

takuk Wells & Huisman, 1993: 103 [type locality: East Malaysia, Sarawak, Bako National Park, Sg. Delima; NTM; ♂; larva; case]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Malaysia.

telamon Malicky & Chantaramongkol, 2007: 1043 [type locality: Nepal, Mahadev Khola, 27°53'N 85°39'E, 1300 m; Collection Malicky; ♂]. —Mattern 2015: 502 [distribution]. —Malicky 2018: 49 [checklist].

Distribution. —Nepal.

telchinos Malicky & Chantaramongkol, 2007: 1045 [type locality: Nepal, Ganesh Himal, Sheplu, 2100 m; Collection Malicky; ♂]. —Mattern 2015: 502 [distribution].

Distribution. —Nepal.

teldi Schmid, 1983: 258 [type locality: [India], Kumaon, Loharket; CNC; ♂]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —India.

telemachos Malicky & Chantaramongkol, 2007: 1044 [type locality: Thailand, Doi Inthanon NP, Bang Khun Klang, 98°32'E 18°32'N, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 53 [atlas; ♂].

Distribution. —Thailand.

telephos Malicky & Chantaramongkol, 2007: 1045 [type locality: Thailand, Ban Yang Bong, 19°21'N 98°54'E, 500 m; Collection Malicky; ♂]. —Malicky 2010a: 53 [atlas; ♂].

Distribution. —Thailand.

tenes Malicky & Chantaramongkol, 2007: 1043 [type locality: Thailand, Doi Inthanon NP, Bang Khun Klang, 98°32'E 18°32'N, 1200 m; Collection Malicky; ♂]. —Malicky 2010a: 53 [atlas; ♂].

Distribution. —Thailand.

terminus Malicky & Chantaramongkol, 2007: 1043 [type locality: Thailand, Chaeson NP, 18°46'N 99°28'E, 500 m; Collection Malicky; ♂]. —Oláh and Johanson 2010a: 85 [distribution]. —Malicky 2010a: 53 [atlas; ♂].

Distribution. —Laos, Thailand.

thacla Oláh, 1989: 256 [type locality: Vietnam, Bac Thai Province, Quang Chu village; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Vietnam.

thorin Schmid, 1983: 2 [type locality: [India], Pauri Garhwal, Jungal Chatti; CNC; ♂]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —India.

thrain Schmid, 1983: 250 [type locality: [India] Sikkim, Karponang; CNC; ♂]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —India.

throbir Schmid, 1983: 264 [type locality: [India], Assam, Manipour, Sirohi Kashong; CNC; ♂]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —India.

throli Schmid, 1983: 258 [type locality: [India] Sikkim, Rangli; CNC; ♂]. —Malicky and Chantaramongkkol 2007: 1046 [distribution]. —Mattern 2015: 502 [distribution]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —India, Nepal.

thror Schmid, 1983: 262 [type locality: [India], Assam, NEFA, Kameng Frontier Division, Chug; CNC; ♂]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —India.

tjeder Schmid, 1959a: 43 [type locality: Pakistan septentrional, Dunga Nar; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Schmid 1983: 252 [distribution]. —Lonsdale 2020: 40 [holotype depository].

Distribution. —India, Pakistan.

tonyi Wells & Huisman, 1993: 102 [type locality: East Malaysia, Sabah, Tenom, stream behind Hotel Tenom; NTM; ♂]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Malaysia.

trungcha Oláh, 1989: 258 [type locality: Vietnam, Bac Thai Province, Quang Chu village; HNHM; ♂]. —Armitage et al. 2005: 28 [checklist]. —Malicky 2010a: 54 [atlas; ♂].

Distribution. —Vietnam.

tuor Schmid, 1983: 268 [type locality: [India], Assam, Manipour, Sihai Khulen; CNC; ♂]. —Lonsdale 2020: 41 [holotype depository].

Distribution. —India.

turanica Ivanov, 1992: 229 [type locality: [Tajikistan], Varzob valley, 23 km from Dushanbe, hygropetrical fauna, near waterfall; ZIN; ♂].

Distribution. —Tajikistan.

ulmeriana Schmid, 1959a: 47 [type locality: Pakistan septentrional, Kaghan; CNC; ♂]. —Schmid 1958c: 220 [as new species, *nomen nudum*; distribution]. —Lonsdale 2020: 41 [holotype depository].

Distribution. —Pakistan.

urania Malicky, 1976: 93 [type locality: Cyprus, Ayios Nikolaos, 870 m; Collection Malicky; ♂]. —Malicky 1983b: 63 [atlas; ♂]. —Malicky 2004a: 78 [atlas]. —Malicky 2005b: 548 [checklist].

Distribution. —Cyprus.

urauchi Ito, 2017c: 225 [type locality: [Japan], Ryukyu Islands, Iriomote-jima, Urauchi-gawa, Kampire-no-taki, 24°21'N, 123°48'E, 90 m; CBM-ZI; ♂; larva].

Distribution. —Japan.

vaillanti Schmid, 1959a: 55 [type locality: Guinée française, sous la roue hydro-électrique de l'Institut Pasteur de Kindia; CNC; ♂]. —Schmid 1983: 282 [checklist]. —Gibon 1985: 249 [distribution]. —Lonsdale 2020: 41 [holotype depository].

Distribution. — Côte d'Ivoire, French Guinea.

wimmeri Malicky, 1988b: 63 [type locality: [Turkey], Ost-Türkei, Sumela-Tal 50 km südlich Trabzon; Collection Malicky; ♂]. —Malicky 2004a: 79 [atlas]. —Malicky 2005b: 548 [checklist]. —Sipahiler 2005: 398 [distribution]. —Sipahiler 2008: 99 [checklist].

Distribution. —Turkey.

yenicensis Sipahiler, 2012b: 1054 [type locality: Turkey, Karabük, Yenice, Karakaya, 41°13'N 32°28'E, 958 m; HUAT; ♂; ♀].

Distribution. —Turkey.

yona Ito, 2017c: 222 [type locality: [Japan], Ryukyu Islands, Okinawa-jima, Kunigami-son, Aha, Fun-gawa, Tanaga-gumui, 26°43'30"N, 128°17'12"E, 78 m; CBM-ZI; ♂; larva].

Distribution. —Japan.

zarva Oláh, 2012: 51 [type locality: Indonesia, Papua, Raja Empat Archipelago, Batanta Island, Warmon Creek, 2. waterfall, 0°50'23.25"S 130°42'35.18"E; Collection Oláh; ♂]. —Oláh and Kovács 2018: 188 [distribution].

Distribution. —Indonesia.

Genus *Stactobiella* Martynov, 1924

Stactobiella Martynov, 1924: 57 [type species: *Stactobia ulmeri* Siltala, 1908, monotypic]. —Ross 1948: 202 [species key to males]. —Marshall 1979b: 169 [generic review]. —Blickle 1979: 8 [key to species of America north of Mexico]. —Moulton and Stewart 1996: 130 [key to species of the Interior Highlands of North America]. —Kachalova in Medvedev 1998: 191 [key to the species of the European part of the USSR].

Tascobia Ross, 1944: 124 [type species: *Stactobia palmata* Ross, 1944, original designation]. —Ross 1948: 202 [to synonymy].

The genus *Stactobiella* is presently represented by 22 species, exhibiting a Holarctic distribution. Discussion of the larva of *S. palmata* was provided by Ross (1944) and Wiggins (1996). Marshall (1979b) concluded, based on the unspecialized larvae and basic hydroptilid form, that *Stactobiella* is a primitive member of Stactobiinae and, based on adult features, that it is most closely related to *Plethus* and *Stactobia*. The three species groups recognized by Marshall (*biramosa*, *brustia*, and *ulmeri*), based on features of the male genitalia, followed those of Ross (1948).

aichi Ito, 2020: 565 [type locality: Japan, Honshu, Aichi, Shinshiro-shi, Toyooka, Ôtsutani-gawa, near river mouth, 34.990556N, 137.624722E, 129 m above sea level; CBM-ZI; ♂].

Distribution. —Japan.

alasignata Botosaneanu, 1993a: 184 [type locality: [Russia], Primorie, Ussuri River in its upper reach, near village Stepanovka, short distance from River Arsenievka mouth; ZIN; ♂; ♀]. —Botosaneanu 1993c: 247 [addenda]. —Arefina et al. 2002:

104 [distribution]. —Ivanov 2011: 196 [checklist]. —Chuluunbat et al. 2016: 102[distribution].

Distribution. —Mongolia, Russia.

amami Ito, 2020: 567 [type locality: Japan, Ryukyu, Amami-o-shima, Uken-son, Kawauchi-gawa, middle reach, 28.2667N, 129.3500E, 90 m above sea level; CBM-ZI; ♂].

Distribution. —Japan.

biramosa Martynov, 1929: 297 [type locality: [Russia], River Bija, near the farm of Smolnikov; depository not designated; ♂]. —Martynov 1934: 158 [♂]. —Spuris 1989: 18 [checklist]. —Arefina et al. 2002: 104 [♂; ♀; distribution]. —Arefina and Armitage 2003: 17 [distribution]. —Ivanov 2011: 196 [checklist]. —Zhou et al. 2016: 214 [distribution]. —Chuluunbat et al. 2016: 102[distribution]. —Potikha and Vshivkova 2016: 364 [distribution]. —Zasykina 2016: 486 [distribution]. —Ito 2020: 562 [♂; ♀; distribution].

Distribution. —China, Mongolia, Russia.

brustia (Ross, 1938a): 115 [type locality: [United States], Wyoming, Parco, along North Platte River; INHS; ♂; in *Stactobia*]. —Ross 1944: 124 [in *Tascobia*]. —Denning 1947a: 145 [distribution]. —Blickle 1979: 55, 61 [checklist; ♂]. —Blinn and Ruiter 2005: 69 [distribution; biology].

Distribution. —U.S.A.

cababa Harris, 1985b: 620 [type locality: [United States], Alabama, Bibb County, Schultz Creek, 4 miles north of Centreville; NMNH; ♂; ♀]. —Harris et al. 1991: 264 [distribution].

Distribution. —U.S.A.

celtikci Çakin, 1983: 236 [type locality: [Turkey], Ankara, Kızılcahamam, Çeltikçi; HUAT; ♂]. —Sipahiler and Malicky 1987: 122, 143 [distribution]. —Malicky 1983b: 61 [atlas; ♂; ♀]. —Malicky 2004a: 73 [atlas]. —Sipahiler 2005: 398 [distribution]. —Malicky 2005b: 548 [checklist].

Distribution. —Turkey.

danra Oláh & Johanson, 2010a: 87 [type locality: Vietnam, Lamdong Province, Baoloc, Duchma stream; Collection Oláh; ♂].

Distribution. —Vietnam.

delira (Ross, 1938a): 115 [type locality: [United States], Wisconsin, Spooner, along Namakagon River; INHS; ♂; in *Stactobia*]. —Ross 1944: 124 [in *Tascobia*]. —Denning 1947a: 145 [distribution]. —Morse and Blickle 1953: 72 [distribution]. —Etnier 1965: 148 [distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 55, 61 [checklist; ♂]. —Swegman and Ferrington 1980: 288 [distribution]. —Parker and Voshell 1981: 4 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Waltz and McCafferty 1983a: 12 [distribution]. —Hamilton et al. 1983: 19 [distribution]. —Bowles and Mathis 1989: 240 [distribution]. —Morse et al. 1989: 25 [distribution]. —Tarter 1990: 239 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Harris et al.

1991: 265 [distribution]. —Masteller and Flint 1992: 70 [distribution]. —Mathis and Bowles 1992: 24 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Floyd and Morse 1993: 177 [distribution]. —Moulton and Stewart 1996: 131 [♂; distribution]. —Wiggins and Parker 1997: 794 [distribution]. —Floyd et al. 1997: 136 [distribution]. USA —Huryn and Harris 2000: 193 [distribution]. —Houghton et al. 2001: 505 [distribution]. —Harris et al. 2002c: 59 [♂]. —DeWalt and Heinold 2005: 42 [phenology; distribution]. —Zack et al. 2006: 134 [phenology; distribution]. —Etnier 2010: 486 [distribution]. —Armitage et al. 2011: 15 [distribution]. —Myers et al. 2011: 110 [distribution]. —Blinn and Ruiter 2013: 291 [biology; distribution]. —Blinn and Ruiter 2013: 279 [biology; distribution]. —Houghton et al. 2017: 63 [checklist]. —Mendez et al. 2019: 119 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —Canada, U.S.A.

eatoni Gibon, 2019: 178 [type locality: Madagascar, bassin de la Betsiboka, tributaire vers Ambalambongo, 16°48'00"S - 47°00'30"E, 48 m; CBGP; ♂].

Distribution. —Madagascar.

kamoro Gibon, 2019: 179 [type locality: Madagascar, bassin de la Betsiboka, Kamoro à Ambohimanatrika, 16°28'55"S - 47°10'06"E, 40 m; CBGP; ♂].

Distribution. —Madagascar.

kumejima Ito, 2020: 567 [type locality: Japan, Ryukyu, Kume-jima, Kumejima-cho, Shirase-gawa, middle reach, 28.351667N, 129.766944E, 32 m above sea level; CBM-ZI; ♂; ♀].

Distribution. —Japan.

lanceolata Gibon, 2019: 180 [type locality: Madagascar, bassin de la Namorona, Namorona vers Ambahona, 21°35'20"S - 48°07'21"E, 20 m; CBGP; ♂].

Distribution. —Madagascar.

marshallae Gibon, 2019: 180 [type locality: Madagascar, bassin du Mangoro, Sahamarirana vers Antsily, 19°00'57"S - 48°07'18"E, 860 m; CBGP; ♂].

Distribution. —Madagascar.

martynovi Blickle & Denning, 1977: 298 [type locality: [United States], Tennessee, Greenbriar Cove, entrance Great Smokey Mountain; FSCA; ♂]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 55, 61 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Harris et al. 1984: 109 [distribution]. —Morse et al. 1989: 25 [distribution]. —Harris et al. 1991: 267 [distribution]. —Masteller and Flint 1992: 70 [checklist]. —Houp 1999: 2 [distribution]. —Floyd et al. 1997: 136 [distribution]. USA —DeWalt and Heinold 2005: 42 [phenology; distribution]. —Myers et al. 2011: 110 [distribution]. —Armitage et al. 2011: 15 [distribution].

—*solzhenitsyni* Sykora & Weaver, 1978: 2 [type locality: [United States], Pennsylvania, Whiteoak Run near Holland House, Powdermill Nature Reserve, Westmoreland County; CMNH; ♂]. —Weaver 1990: 360 [to synonymy].

Distribution. —U.S.A.

mutica Zhou, Yang, & Morse, 2016: 211 [type locality: China, Si-chuan Province, Ma-bian County, Tian-xing village, Zhong-shan-gou stream, 4.9 km W of bridge in Ma-bian, 28.8492°N, 103.5091°E, 597 m; NAUJ; ♂].

Distribution. —China.

nikulinae Arefina, 2004: 210 [type locality: Russia, Primorye, Ilistaya River at Lyalichi Villave, Khanka Lake basin; IBSS-RAS; ♂]. —Ivanov 2011: 196 [checklist]. —Potikha and Vshivkova 2016: 364 [distribution].

Distribution. —Russia.

palmata (Ross, 1938a): 116 [type locality: [United States], Wisconsin, Merrill, along Wisconsin River; INHS; ♂; in *Stactobia*]. —Ross 1944: 125 [♂; ♀; distribution; in *Tascobia*]. —Morse and Blickle 1953 [72 [distribution]. —Etnier 1968: 191 [distribution]. —Etnier and Schuster 1979: 18 [distribution]. —Blickle 1979: 55, 61 [checklist; ♂]. —Parker and Voshell 1981: 4 [distribution]. —Huryn and Foote 1983: 791 [distribution]. —Hamilton et al. 1983: 19 [distribution]. —Steven and Hilsenhoff 1984: 164 [distribution]. —Floyd and Schuster 1990: 130, 132 [distribution]. —Frazer et al. 1991: 20 [distribution]. —Harris et al. 1991: 267 [distribution]. —Masteller and Flint 1992: 70 [distribution]. —Bowles and Mathis 1992: 32 [distribution]. —Moulton and Stewart 1996: 1131 [♂; distribution]. —Houghton et al. 2001: 505 [distribution]. —Biondi 2010: 61 [distribution; as *palmate*]. —Etnier 2010: 486 [distribution]. —Armitage et al. 2011: 15 [distribution]. —Myers et al. 2011: 110 [distribution]. —Houghton et al. 2017: 63 [checklist]. —Bowles et al. 2020: 8 [distribution].

Distribution. —U.S.A.

parallelica Zhou, Yang, & Morse, 2016: 211 [type locality: China, Jiang-xi Province, Jiu-Lian-shan Mt. National Nature Reserve, at the confluence of Huang-niu-shi & Da-shui-keng Streams, 1.2 km SE of Dun-tou Village, 24.31°N, 114.25°E, 546 m; NAUJ; ♂].

Distribution. —China.

risi (Felber, 1908): 720 [type locality: [Switzerland] Rheinufer in der Stadt Basel; possibly deposited in MZHF; ♂; in *Microptila*]. —Ulmer 1929: 253 [to *Stactobiella*]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [checklist]. —Kumanski and Malicky 1984: 199 [distribution]. —Kumanski 1985: 110 [♂]. —Andersen and Wiberg-Larsen 1987: 169 [checklist]. —Usseglio-Polatera and Bournaud 1989: 253 [distribution]. —Nógrádi 1994: 271 [distribution ♂ ♀]. —Uherkovich and Nógrádi 1997: 461 [distribution]. —Graf et al. 1998: 207 [distribution]. —Uherkovich and Nógrádi 1998: 52 [distribution]. —Malicky 1999f: 32 [distribution]. —Graf and Waringer 2002: 420 [larva; distribution]. —Ujvárosi 2002: 384 [distribution]. —Gullefors 2002: 138 [checklist]. —Malicky 2004a: 73 [atlas]. —Malicky 2005b: 548 [checklist]. —Malicky 2005a: 69 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Gullefors 2006: 137 [distribution]. —Mey 2006a: 159 [distribution]. —Gullefors 2008: 64 [distribution]. —Ujvárosi et al. 2008: 113

[checklist]. —Višinskienė 2009: 28 [checklist]. —González and Menéndez 2011: 119 [distribution]. —Waringer and Graf 2011: 281 [larval synopsis]. —Gullefors 2016: 156 [checklist].

—*ulmeri* (Siltala, 1908): 14 [type locality: [Finland] Keminjoki, Tervola; depository not designated; ♂; in *Stactobia*]. —Martynov 1924: 58 [♂; ♀; to *Stactobiella*]. —Martynov 1934: 157 [♂]. —Racięcka 1936: 98 [distribution]. —Nybom 1960: 20 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 340 [to synonymy]. —Kumanski 1979: 4 [♂; distribution]. —Spuris 1989: 18 [as senior synonym of *S. risi*]. —Cibaitė 2003a: 10 [distribution]. —Robert 2007: 82 [checklist]. —Ivanov 2011: 196 [checklist].

Distribution. —Austria, Bulgaria, Finland, France, Germany, Greece, Italy, Hungary, Lithuania, Macedonia, Portugal, Romania, Spain, Sweden, Switzerland.

siribhum Malicky & Chantaramongkol, 2007: 1054 [type locality: Thailand, Doi Inthanon NP, Namtok Siribhum, 18°32'N 98°31'E, 1300 m; ♂]. —Malicky 2010a: 56 [atlas; ♂].

Distribution. —Thailand.

tshistjakovi (Arefina & Morse) in Arefina et al. 2002: 103 [type locality: [Russia] Southern Primorye Territory, Khasansky Region, Amba River; IBSS-RAS; ♂; in *Stactobia*]. —Arefina and Armitage 2003: 17 [distribution]. —Arefina 2004: 209 [to *Stactobiella*]. —Ivanov 2011: 548 [checklist]. —Tanida and Kuranishi 2016: 73 [distribution]. —Potikha and Vshivkova 2016: 364 [distribution]. —Ito 2020: 562 [♂; ♀; distribution].

Distribution. —Japan, Russia.

Genus *Tizatetrichia* Harris, Flint, & Holzenthal, 2002

Tizatetrichia Harris, Flint, & Holzenthal, 2002b: 55 [type species: *Tizatetrichia costaricensis* Harris, Flint, & Holzenthal, 2002b, original designation].

Tizatetrichia contains two species occurring in Central America. The female and larva are unknown. Based on similarities occurring in the male genitalia, the genus is most closely related to *Bredinia* (Harris et al., 2002b).

costaricensis Harris, Flint, & Holzenthal, 2002b: 58 [type locality: Costa Rica, Guanacaste, Río Tizate, 7.2 km NE Cañas Dulces, 10.773°N 85.449°W, 275 m; NMNH; ♂].

Distribution. —Costa Rica.

panamensis Harris & Armitage, 2019: 18 [type locality: Panama, Bocas del Toro Province, Quebrada Rambala, near Rambala Jungle Lodge, 3.74 km SSE Rambala, 8.91543°N and 82.15527°W, 120 m; COZEM; ♂]. —Armitage and Harris 2020a: 8 [distribution].

Distribution. —Panama.

HYDROPTILIDAE incertae sedis

Genus *Burminoptila* Botosaneanu, 1981 †

Burminoptila Botosaneanu, 1981a: 75 [type species: *Burminoptila bemeneha* † Botosaneanu, 1981a, original designation].

The genus *Burminoptila* is represented by a single fossil species known from Burmese amber. No further information regarding diagnostic features or placement of the genus within Hydroptilidae was provided.

† *bemeneha* Botosaneanu, 1981a: 77 [type locality: [Myanmar] Burma; NHMUK; ♂; in amber]. —Eskov et al. 2008: 78 [checklist]. —Ivanov and Melnitsky 2017: 131 [checklist].

Distribution. —Burmese amber.

Genus *Dicaminus* Müller, 1879

Dicaminus Müller, 1879b: 39 [type species: no included species, but *Dicaminus* replaced *Diaulus* and thus received its type species, *ladislavii*]. —Ulmer 1957: 172 [references]. —Marshall 1979b: 220 [generic review].

Diaulus Müller 1879a: 142 [type species: *Diaulus ladislavii* Müller, 1879a, monotypic]. —Ulmer 1957: 173 [to synonymy].

Dicaminus consists of a single species occurring in South America. Müller (1879b) described several atypical larval cases with small dorsal chimneys under the generic name *Dicaminus*. The material was from Brazil, but neither a larval description nor a specific epithet was provided. He then subsequently made reference to these same cases under the name *Diaulus ladislavii* (Müller 1879a). *Diaulus* was later synonymized with *Dicaminus* (Ulmer 1957). A number of cases with dorsal chimneys have been found in material from Argentina, Bolivia, Ecuador, Panama, and Venezuela (Botosaneanu and Flint 1982). Some of these contain male metamorphotypes of *Metrichia* spp., which suggests that *Dicaminus* may prove to be either synonymous with or closely related to *Metrichia* (Flint et al. 1999b). Neither the adult nor the larval stage has been described.

ladislavii Müller, 1879a: 142 [type locality: South Brazil; type depository unknown; case]. —Müller 1880: 118 [case; figures, type locality: [Brazil], Santa Catarina, Ribeirão dos Bugres, tributary of Itajahy]. —Ulmer 1957: 172 [complete references]. —Angrisano 1999: 32 [checklist]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 44 [checklist].

Distribution. —Brazil.

Genus *Electrotrichia* Ulmer, 1912 †

Electrotrichia Ulmer, 1912a: 42 [type species: *Electrotrichia subtilis* † Ulmer, 1912a, monotypic]. —Marshall 1979b: 222 [generic review].

The genus *Electrotrichia* is represented by a single fossil species known from Baltic amber. Marshall (1979b) stated that the genus may share similarities with members of the Hydroptilinae in the wing shape and spur formula.

† *subtilis* Ulmer, 1912a: 43 [type locality: [Baltic region]; holotype missing, originally deposited in “Klebs collection” (x 64); ♂; in amber]. —Eskov et al. 2008: 78 [checklist]. —Wichard 2013: 50 [species review].

Distribution. —Baltic amber.

Genus *Macrostactobia* Schmid, 1958

Macrostactobia Schmid, 1958b: 46 [type species: *Macrostactobia elawalikanda* Schmid, 1958b, original designation]. —Marshall 1979b: 217 [generic review]. —Wells and Huisman 1992: 94 [larva].

Macrostactobia consists of two species recorded from Sri Lanka and West Malaysia. Schmid (1958b) stated that, due to its relatively larger size and complete wing venation, the genus is somewhat primitive. He placed it in a branch of Stactobiinae that also included the genera *Parastactobia*, *Plethus*, and *Chrysotrichia*. Marshall (1979b) noted that the male genitalia are unique and that the antennae are typical of Stactobiinae, but declined to place the genus, leaving it incertae sedis. The final instar larva of *M. runcing* was described by Wells and Huisman (1992).

elawalikanda Schmid, 1958b: 47 [type locality: [Sri Lanka], Ceylan, Horton Plains (C. P., 7000 ft) 7-8-III, partie supérieure de la Beliul Oya, ruisseau calme, assez profond, à fond boueux, formant des <<pools>>; depository not designated; ♂].

Distribution. —Sri Lanka.

runcing Wells & Huisman, 1992: 94 [type locality: West Malaysia, Cameron Highlands, falls at “40 mile”, on road between Tapah and Tanah Rata; NTM; ♂; ♀; larva; pupa]. —Malicky 2010a: 38 [atlas; ♂].

Distribution. —Malaysia.

Genus *Novajerseya* Botosaneanu, Johnson, & Dillon, 1998 †

Novajerseya Botosaneanu, Johnson, & Dillon, 1998: 225 [type species: *Novajerseya glesumica* † Botosaneanu, Johnson, & Dillon, 1998, original designation].

The genus *Novajerseya* is represented by a single fossil species known from Upper Cretaceous amber found in New Jersey. No further information regarding diagnostic features or placement of the genus within Hydroptilidae was provided.

† *glesumica* Botosaneanu, Johnson, & Dillon, 1998: 225 [type locality: United States, New Jersey; ANSP; ♂; in amber]. —Wichard and Lürer 2003: 132 [checklist]. —Eskov et al. 2008: 78 [checklist]. —Sukatsheva and Vassilenko 2016: 411 [wing venation]. —Ivanov and Melnitsky 2017: 131 [checklist].

Distribution. —New Jersey amber.

Genus *Orphninostrichia* Mosely, 1934

Orphninostrichia Mosely, 1934a: 138 [type species: *Orphninostrichia maculata* Mosely, 1934a, original designation]. —Marshall 1979b: 220 [generic review]. —Wells 1980: 628 [revision; key to males]. —Wells 1985b: 19 [larva; pupa; case]. —Wells 1997: 1–28 [checklist; key to larvae]. —Wells 1999: 221 [new species; zoogeography; new records]. Wells 2002a: 224 [key to males]. —Wells 2010a: 48 [re-description].

The genus *Orphninostrichia* consists of 20 species occurring in Australia. The genus was established on the basis of unique wing venation and unique male genitalia (Mosely 1934a). Marshall (1979b) left the genus as incertae sedis, but did comment on possible affinities with Hydroptilinae and noted ways in which *Orphninostrichia* differs from the genera *Hydroptila* and *Oxyethira*. Wells (1987) also considered the genus to belong to Hydroptilinae. Holzenthal et al. (2007b), based on the World Trichoptera Checklist, treated the genus as incertae sedis. The larvae of *O. maculata* was described by Wells (1985b).

acta Neboiss, 1977: 40 [type locality: [Australia] Tasmania, Ulverstone, 4 km NW waterfalls; NMV; ♂; ♀]. —Wells 1980: 632 [♂, ♀; distribution]. —Neboiss 1986: 66 [atlas; ♂; ♀]. —Neboiss 2002: 52 [checklist].

Distribution. —Australia.

alata Wells, 2010a: 50 [type locality: [Australia] Queensland, Crystal Cascades, Tributary of Crystal Creek, 16.96508S 145.67603E ± 2 m, 69 m asl; QM; ♂].

Distribution. —Australia.

barbarae Wells, 2010a: 48 [type locality: [Australia] Queensland, Kuranda (Top of the Range), 16°48'S 145°38'E (335 m), 19 Butler Drive; ANIC; ♂].

Distribution. —Australia.

benambrica Wells, 1983: 646 [type locality: Australia, Victoria, Benambra Creek, 25 km NE. Benambra at granite falls; NMV; ♂; ♀]. —Wells 1985b: 21 [pupa]. —Neboiss 1986: 65 [atlas; ♂; ♀].

Distribution. —Australia.

bilobata Wells, 2002a: 222 [type locality: [Australia] New South Wales, Chichester State Forest, Dundungra Falls; ANIC; ♂].

Distribution. —Australia.

claviculata Wells, 2002a: 222 [type locality: [Australia] New South Wales, Chichester State Forest, Dundungra Falls; ANIC; ♂].

Distribution. —Australia.

desleyae Wells, 2010a: 49 [type locality: [Australia] Queensland, Crystal Cascades, Tributary of Crystal Creek, 16.96508S 145.67603E \pm 2 m, 69 m asl; QM; ♂].

Distribution. —Australia.

dundungra Wells, 2002a: 222 [type locality: [Australia] New South Wales, Chichester State Forest, Dundungra Falls; ANIC; ♂].

Distribution. —Australia.

gilva Wells, 1999: 226 [type locality: [Australia, Lord Howe Island] Erskine Creek, Erskine Valley; ANIC; ♂; ♀].

Distribution. —Australia.

justini Wells, 1983: 645 [type locality: Australia, Victoria, Stevenson Falls, Upper Gellibrand R.; NMV; ♂; ♀]. —Neboiss, 1986: 67 [atlas; ♂; ♀].

Distribution. —Australia.

maculata Mosely, 1934a: 139 [type locality: [Australia] Hornsby, New South Wales; Collection Tillyard (transferred to NHMUK according to Wells 1980: 630); ♂]. —Mosely and Kimmins 1953: 511 [♂]. —Wells 1980: 630 [♂; ♀; distribution]. —Wells 1985b: 21 [larva; pupa; case]. —Neboiss 1986: 65 [atlas; ♂; ♀]. —Neboiss 2002: 52 [checklist].

Distribution. —Australia.

media Wells, 1980: 632 [type locality: [Australia] Victoria, Porepunkah; NMV; ♂]. —Neboiss 1986: 66 [atlas; ♂].

Distribution. —Australia.

originis Wells, 1990c: 111 [type locality: [Australia] Northern Territory, Kakadu National Park, Radon Springs, 12°45'S 132°55'E; NTM; ♂].

Distribution. —Australia.

papillata Wells, 1980: 635 [type locality: [Australia] Victoria, Tawonga; NMV; ♂; ♀]. —Neboiss, 1986: 67 [atlas; ♂; ♀]. —Wells 2002a: 224 [♂; distribution].

Distribution. —Australia.

plumosa Wells, 1999: 224 [type locality: [Australia, Lord Howe Island] Erskine Creek, Erskine Valley; ANIC; ♂; ♀; case].

Distribution. —Australia.

regia Wells, 1980: 632 [type locality: [Australia] Victoria, Kinglake; NMV; ♂; ♀]. —Neboiss 1986: 65 [atlas; ♂; ♀].

Distribution. —Australia.

rugosa Wells, 1999: 226 [type locality: [Australia, Lord Howe Island] Erskine Creek, Erskine Valley; ANIC; ♂; ♀; case].

Distribution. —Australia.

silicis Wells, 1980: 635 [type locality: [Australia] North Queensland, Tinaroo Lake Road, Stream at M4; NMV; ♂]. —Neboiss 1986: 66 [atlas; ♂]. —Wells 2010a: 50 [distribution].

Distribution. —Australia.

squamosa Wells, 1999: 228 [type locality: [Australia, Lord Howe Island] Erskine Creek, Erskine Valley; ANIC; ♂; ♀; case].

Distribution. —Australia.

subulata Wells, 1983: 647 [type locality: Australia, New South Wales, Undercliffe Falls, 12 km E. Liston; NMV; ♂]. —Wells 1985b: 21 [pupa]. —Neboiss 1986: 66 [atlas; ♂].

Distribution. —Australia.

Family PTILOCOLEPIDAE Martynov, 1913

Palaeagapetinae Ross, 1956: 18 [type genus: *Palaeagapetus* Ulmer, 1912a, as *Paleagapetus*].

Ptilocolepinae Martynov, 1913a: 22 [type genus: *Ptilocolepus* Kolenati, 1848]. —Marshall 1979b: 157 [reviewed as subfamily of Hydroptilidae]. —Ito 1998: 85 [world distribution; biology; recent and fossil taxa]. —Malicky 2001b: 20 [elevated from subfamily of Hydroptilidae]. —Malicky 2005b: 542 [confirmed as distinct from Hydroptilidae]. —Malicky 2008b: 43 [family status discussed with respect to work of Thienemann 1904a].

The family Ptilocolepidae contains two small genera known to have a Holarctic distribution. The adults bear a resemblance to some of the smaller members of the caddisfly family Glossosomatidae, while the larval stage indicates an affinity with Hydroptilidae. Males have highly specialized genitalia that are characteristic of the group (Marshall 1979b). The larvae of both genera can be found in small montane springs on vegetation, stones, or other submerged surfaces and are often found in association with bryophytes (Ito 1998).

Genus *Palaeagapetus* Ulmer, 1912

Palaeagapetus Ulmer, 1912a: 35 [type species: *Palaeagapetus rotundatus* Ulmer, 1912a, monotypic]. —Marshall 1979b: 160 [generic review]. —Blickle 1979: 8 [key to species of America north of Mexico].

Eleven species of *Palaeagapetus*, including two fossil species, occur in a mostly East Palearctic distribution, with a few distributed across the Nearctic faunal region. Characters that unite the genus can be found in features of the wing venation, spur formula, and the male genitalia (Marshall, 1979b). The larvae of *P. celsus* were described by Flint (1962).

celsus (Ross, 1938a): 111 [type locality: United States, North Carolina, Newfound Gap, along Little Pigeon River; INHS; ♂; in *Paragapetus*]. —Roy and Harper 1975: 1082 [distribution]. —Roy and Harper 1979: 150 [checklist]. —Etnier and Schuster 1979: 18 [checklist]. —Blickle 1979: 55, 61 [checklist; ♂]. —Parker and Voshell 1981: 4 [checklist]. —Tarter 1990: 239 [checklist]. —Masteller and Flint 1992: 70 [checklist]. —Bowles and Mathis 1992: 32 [distribution]. —DeWalt and Heinold 2005: 42 [phenology; distribution]. —Myers et al. 2011: 110 [distribution]. —Ito et al. 2014: 211 [♂; ♀; biology; distribution].

Distribution. —Canada, U.S.A.

finisorientis Botosaneanu & Levanidova, 1987: 43 [type locality: U.S.S.R., Vodopadny spring, bassin of Kedrovaya River, “Kedrovaya Pad” Nature Reserve, Vladyvostok district; ZIN; ♂]. —Spuris 1989: 18 [checklist]. —Ito and Vshivkova 1999: 141 [♂; ♀, pupa; larva; egg; biology; distribution]. —Ivanov 2011: 194 [distribution].

Distribution. —Russia.

flexus Ito, 1991b: 419 [type locality: Japan, Creek Kumanosawa, Takaoka, Tomakomai; EIHU; ♂]. —Ito et al. 1993: 143 [checklist]. —Ito et al. 1997: 100 [distribution]. —Ito 1998: 85 [distribution; biology]. —Minakawa et al. 2004: 51 [distribution]. —Tanida et al. 2005: 441 [♂]. —Ivanov 2011: 194 [distribution]. —Tanida and Kuranishi 2016: 74 [checklist].

Distribution. —Japan, Russia.

fukuiensis Ito, 2010: 1 [type locality: Japan, Fukui Prefecture, Katsuyama-shi, Akausagi-yama, small stream, 36°04'N, 136°39'E, 1,300 m; CBM-ZI; ♂; ♀; larva]. —Tanida and Kuranishi 2016: 74 [checklist].

Distribution. —Japan.

† ***furcilla*** Botosaneanu, Johnson, & Dillon, 1998: 220 [type locality: United States, New Jersey; ANSP; ♂; in amber]. —Wichard and Lüer 2003: 132 [checklist]. —Eskov et al. 2008: 78 [checklist].

Distribution. —New Jersey amber.

kyushuensis Ito & Kuhara in Ito et al. 1997: 101 [type locality: Japan, a brooklet in Hikosan Biological Station of Kyushu University, Hikosan, Soeda-cho, Fukuoka; CBM-ZI; ♂]. —Ito 1998: 85 [distribution; biology]. —Tanida et al. 2005: 441 [♂]. —Tanida and Kuranishi 2016: 74 [checklist].

Distribution. —Japan.

nearcticus Banks, 1936: 265 [type locality: United States, Washington, White River, Mt. Ranier; MCZ; ♂]. —Blickle 1979: 55, 61 [checklist; ♂]. —Ito et al. 2014: 202 [♂; ♀; pupa; larva; biology; distribution]. —Mendez et al. 2019: 119 [checklist].

—***guppyi*** Schmid, 1951: 1 [type locality: [Canada] Mt. Benson; depository not designated; ♂]. —Blickle 1979: 55, 61 [checklist; ♂]. —Botosaneanu and Levanidova 1987: 43 [treated as a synonym]. —Djernaes and Sperling 2011: 86 [abdominal sternum glands].

Distribution. —Canada, U.S.A.

ovatus Ito & Hattori, 1986: 143 [type locality: Japan, Rankoshi, Chitose, Hokkaido; EIHU; ♂; ♀; pupa; larva; egg]. —Ito 1988: 148 [life history]. —Ito et al. 1993: 143 [checklist]. —Ito et al. 1997: 98 [♂; distribution]. —Ito 1997: 177 [oviposition site]. —Ito 1998: 85 [distribution, biology]. —Ito 1988: 148 [life history]. —Tanida et al. 2005: 441 [larva; ♂]. —Tanida and Kuranishi 2016: 74 [checklist].

Distribution. —Japan.

parvus Ito, 1991a: 359 [type locality: Japan, small stream near Shindai-goya, Mt. Hyonosen, Hyogo Prefecture; EIHU; ♂; ♀; pupa; larva; egg]. —Ito et al. 1993: 143 [checklist]. —Ito et al. 1997: 99 [♂; distribution]. —Tanida et al. 2005: 441 [♂]. —Mey and Nozaki 2006: 24 [distribution]. —Tanida and Kuranishi 2016: 74 [checklist].

Distribution. —Japan.

† **rotundatus** Ulmer, 1912a: 36 [type locality: [Baltic region]; holotype missing, originally deposited in “Klebs collection” (no. 5690); ♂; in amber]. —Eskov et al. 2008: 78 [checklist]. —Wichard 2013: 53 [species review].

Distribution. —Baltic amber.

shikokuensis Utsunomiya & Ito in Ito et al. 1997: 103 [type locality: Japan, Sagawa, Shigenobu-cho, Ehime; CBM-ZI; ♂]. —Ito et al. 2002: 21 [biology]. —Tanida et al. 2005: 441 [♂]. —Tanida and Kuranishi 2016: 74 [checklist].

Distribution. —Japan.

Genus *Ptilocolepus* Kolenati, 1848

Ptilocolepus Kolenati, 1848: 102 [type species: *Ptilocolepus turbidus* Kolenati, 1848, monotypic]. —Fischer 1961: 80 [*P. turbidus* synonymized with *Rhyacophila granulatus* Pictet, 1834]. —Marshall 1979b: 160 [generic review]. —Kachalova in Medvedev 1998: 191 [key to the species of the European part of the USSR]. —Malicky 2001b: 20 [taxonomic notes].

This genus contains eight species recorded in a Palearctic distribution and, at different times, has been placed in the families Rhyacophilidae, Hydroptilidae, and Glossosomatidae (Pictet 1834; Ulmer 1907; Martynov 1913b; Malicky 1983b). Features used to identify members of *Ptilocolepus* include wing venation and the general structure of the male genitalia (Marshall 1979). The larvae of *P. granulatus* have been described by Thienemann (1904a) and Jacquemart and Coineau (1962).

atiloma Schmid, 1990: 239 [type locality: [India] Inde, Assam, United Jaintia and Khasi Hills, Mawpran; CNC; ♂].

Distribution. —India.

colchicus Martynov, 1913a: 26 [type locality: [Georgia]; depository not designated; ♂]. —Martynov 1913b: 10 [♀]. —Schmid 1913: 10 [♀; distribution]. —Martynov 1934: 114 [♂]. —Schmid 1959b: 684 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 339 [checklist]. —Kumanski 1980: 38 [distribution]. —Sipahiler and Malicky 1987: 112, 135 [distribution]. —Spuris 1989: 18 [checklist]. —Mirmoayedi and Malicky 2002: 164 [distribution].

—Malicky 2004a: 50 [atlas]. —Malicky 2005b: 542 [checklist]. —Sipahiler 2005: 396 [distribution]. —Sipahiler 2007: 38 [distribution]. —Sipahiler 2008: 93 [distribution]. —Sipahiler 2008: 103 [checklist]. —Ivanov 2011: 194 [distribution]. —Sipahiler 2012a: 7 [distribution]. —Sipahiler 2016: 13 [distribution]. —Sipahiler 2017a: 10 [note on morphological malformation]. —Küçükbasmaci and Kiyak 2017: 488 [distribution]. —Oláh et al. 2020: 46 [distribution].

Distribution. —Georgia, Iran, Russia, Turkey.

dilatatus dilatatus Martynov, 1913a: 23 [type locality: [Georgia]; depository not designated; ♂]. —Martynov 1934: 113 [♂]. —Botosaneanu 1967: 293 [as synonym of *P. granulatus*]. —Botosaneanu and Malicky 1978: 339 [as junior synonym of *P. granulatus*; checklist]. —Kumanski 1980: 38 [♀; distribution]. —Spuris 1989: 18 [checklist]. —Malicky 2004a: 50 [atlas]. —Sipahiler 2005: 396 [distribution; as *granulatus dilatatus*]. —Malicky 2005b: 542 [checklist; treated as distinct species]. —Sipahiler 2007: 38 [distribution]. —Sipahiler 2008: 93 [distribution]. —Sipahiler 2008: 103 [checklist]. —Ivanov 2011: 194 [distribution]. —Sipahiler 2012a: 7 [distribution]. —Sipahiler 2016: 13 [distribution]. —Oláh et al. 2020: 46 [distribution].

Distribution. —Georgia, Russia, Turkey.

dilatatus minor Martynov, 1913b: 9 [type locality: [Georgia], Caucase, la province de Batoum et des environs du Novyj Afon; depository not designated; ♂]. —Martynov 1934: 113 [morphological note; distribution].

Distribution. —Georgia, Russia.

extensus McLachlan, 1884: 70 [type locality: Portugal, Beira Baixa; depository not designated; ♂]. —Schmid 1952: 649 [distribution]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 339 [checklist]. —González et al. 2000: 27 [larva; case; pupa; biology; distribution]. —Malicky 2004a: 50 [atlas]. —Malicky 2005b: 542 [checklist]. —González and Menéndez 2011: 118 [distribution]. —Martín et al. 2014: 67 [distribution]. —Martínez et al. 2015: 40 [distribution]. —Martín et al. 2016: 261 [distribution].

Distribution. —Portugal, Spain.

granulatus (Pictet, 1834): 197 [type locality: type locality not given; depository not designated; ♂]. —Mclachlan 1884: 69 [distribution]. —Ris 1897: 431 [distribution; as *grannulatus*]. —Ris 1903: 16 [distribution]. —Thienemann 1904a: 418 [larva]. —Schmid 1952: 649 [distribution]. —Jacquemart and Coineau 1962: 7 [larva]. —Botosaneanu 1967: 293 [distribution]. —Botosaneanu and Malicky 1978: 339 [checklist]. —Moretti and Cianficconi 1981: 200 [checklist]. —Kumanski 1985: 106 [♂]. —Nógrádi 1986: 135 [distribution; ♂; ♀]. —Sipahiler and Malicky 1987: 112, 135 [distribution]. —Spuris 1989: 18 [checklist]. —Wiberg-Larsen et al. 1991: 45 [distribution]. —Kahnert 1995: 124 [distribution]. —Ito 1998: 85 [distribution biology]. —Cianficconi et al. 1999: 57 [distribution]. —Waringer and Graf 2002: 121 [ecology morphology; distribution]. —Malicky 2004a: 50 [atlas]. —Cianficconi et al. 2004: 329 [distribution]. —Cianficconi et al. 2005: 96 [habitat; distribution]. —Malicky 2005b: 542 [checklist]. —Graf et al. 2005: 55 [distribution]. —Lubini-Ferlin and Vicentini 2005: 68 [checklist]. —Robert 2007: 82 [checklist]. —Szczesny and Godunko 2008: 14 [distribution]. —Chvojka and Komzák 2008:

- 13 [distribution]. —Schrankel et al. 2008: 90 [checklist]. —Chvojka et al. 2009: 82 [distribution]. —Menéndez and González 2010: 341 [distribution]. —Oláh 2010: 91 [distribution]. —González and Menéndez 2011: 118 [distribution]. —Coppa 2013: 123–132 [distribution]. —Mey 2014: 184, 187 [distribution]. —Martín et al. 2016: 261 [distribution]. —Valle and Lodovici 2018: 146 [distribution].
- funereus* Kolenati, 1859: 203 [type locality: unknown; probably NHMW; probably ♂]. —Fischer 1961: 80 [listed as a synonym].
- turbidus* Kolenati, 1848: 102 [type locality: [Germany]; probably NHMW; probably ♂]. —Fischer 1961: 80 [listed as a synonym].
- Distribution.** —Austria, Belgium, Czech Republic, England, Denmark, France, Germany, Hungary, Italy, Luxembourg, Spain, Switzerland, Turkey, Ukraine.
- namnao* Malicky & Chantaramongkol, 1996: 119 [type locality: [Thailand] Nam Nao NP, 800 m; Collection Malicky; ♂].
- Distribution.** —Thailand.
- villosus* Navás, 1916: 83 [type locality: [Spain] Aragón; depository not designated; ♂; ♀]. —Malicky, 2005b: 542 [checklist].
- Distribution.** —Spain.

TRICHOPTERA incertae sedis

Genus *Eutonella* Müller, 1921

Eutonella Müller, 1921: 531 [type species: *Eutonella peltopsychoides* Müller, 1921, monotypic]. —Ulmer 1957: 316 [systematic placement]. —Santos et al. 2016a: 460 [systematic placement].

Eutonella is a monotypic genus of unplaced systematic position within the order Trichoptera recorded from South America. Only the figure of a pupal mandible is known for the genus, and it could be placed in either Hydroptilidae or Psychomyiidae (Flint et al. 1999b). The mandible lacks teeth or serrations, a state that Müller (1921) concluded was only exhibited by microcaddisflies, placing it in Hydroptilidae (Flint et al. 1999b). Ulmer (1957) associated the mandible with a series of unnamed cases from Müller's earlier works; the descriptions of the cases led Flint et al. (1999b) to place *Eutonella* in Leucotrichiinae. Based on the 2-4-4 tibial spur formula indicated by Müller (1880a, 1880b), which is inconsistent with that of any other hydroptilid, Santos et al. (2016a) placed the species in Trichoptera incertae sedis.

peltopsychoides Müller, 1921: 531, fig. 184 l [type locality: Brazil; type depository unknown; pupal mandible]. —Ulmer 1957: 316 [bibliography]. —Flint et al. 1999b: 76 [identity; from Psychomyiidae to Hydroptilidae]. —Paprocki et al. 2004: 11 [checklist]. —Paprocki and França 2014: 44 [checklist]. —Santos et al. 2016a: 460 [to Trichoptera incertae sedis].

Distribution. —Brazil.

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Index

A

- abacatia*, *Oxyethira*...130
abantica, *Hydroptila*...41
abbotti, *Hydroptila*...41
abbreviata, *Neotrichia*...130
abbreviata, *Oxyethira*...225
abbreviatoides, *Neotrichia*...225
aberrans, *Metrichia*...252
aberrans, *Orthotrichia*...304
abongae, *Catoxyethira*...338
abrelata, *Byrsopteryx*...194
abrelata, *Ochrotrichia*...281
absona, *Oxyethira*...130
Abtrichia [Leucotrichiinae]...214, 215
acadia, *Hydroptila*...42
acantha, *Hydroptila*...42
Acanthotrichia
[Hydroptilinae]...2, 5, 22
acicula, *Metrichia*...252
acina, *Orthotrichia*...304
acinacis, *Hydroptila*...42
acoma, *Hydroptila*...49
Acostatrichia
[Leucotrichiinae]...3, 5, 199, 200, 201, 207, 208
Acritoptila [Hydroptilinae]...2, 5, 22, 23, 36
acrodonta, *Hydroptila*...69
acta, *Orphninostrichia*...390
aculea, *Oxyethira*...130
aculeata, *Orthotrichia*...304
acuminata, *Hydroptila*...42
acuminata, *Metrichia*...252
acuta, *Hydroptila*...42
acuta, *Oxyethira*...131
acuta, *Ugandatrichia*...181
acutangulata, *Hydroptila*...42
acuti, *Angrisanioia*...247
acutissima, *Hydroptila*...70
acutus, *Plethus*...362, 363
adamsae, *Metrichia*...252
adana, *Hydroptila*...42
adela †, *Leucotrichia*...208
adirecta, *Ascotrichia*...203
adornata, *Orthotrichia*...304
adunca, *Cerasmatrichia*...196
adunca, *Orthotrichia*...309
advena, *Orthotrichia*...304
aegerfasciella, *Orthotrichia*...303, 304
aegyptia, *Hydroptila*...42, 96
Aenigmatrichia
[Hydroptilinae]...2, 5, 22, 24
aeola, *Oxyethira*...131
aequatoriana, *Orthotrichia*...306
aequispina, *Neotrichia*...225
affinis, *Ochrotrichia*...268
africana, *Hydroptila*...43
africana, *Ugandatrichia*...181
Afritrachia [Stactobiinae]...365
agaboga, *Anchitrichia*...202
agazoka, *Angrisanioia*...247
aglae, *Alisotrichia*...187
agosana, *Hellyethira*...36
agosensis, *Hydroptila*...43
Agraules [Hydroptilinae]...25
Agraylea [Hydroptilinae]...2, 5, 7, 11, 22, 25, 26, 28, 29, 31, 32, 35, 179, 181, 250
agtuuganonica,
Orthotrichia...306
ahipara, *Oxyethira*...131
aichi, *Stactobiella*...383
aiema, *Orthotrichia*...306
aibel, *Stactobia*...366
airensis, *Hydroptila*...60
airterjun, *Orthotrichia*...306
aitija, *Alisotrichia*... see *hirudopsis*
aitija, *Alisotrichia*...190
ajax, *Hydroptila*...43
ajsae, *Catoxyethira*...338
akaiah, *Pseudoxyethira*...355
akanthos, *Cerasmatrichia*...196
akibeel, *Oxyethira*...131
alabama, *Hydroptila*...44
alabamensis, *Neotrichia*...225
alai, *Hydroptila*...44
alajuela, *Flintiella*...350
alajuela, *Metrichia*...252
alaluz, *Oxyethira*...131
alaplica, *Stactobia*...366
alara, *Hydroptila*...44
alarca, *Zumatrichia*...216
alargada, *Ochrotrichia*...268
alasignata, *Stactobiella*...383
alata, *Neotrichia*...225
alata, *Orphninostrichia*...390
alata, *Orthotrichia*...306
alata, *Pseudoxyethira*...355
alayoana, *Alisotrichia*...188
albaeaequae, *Oxyethira*...131
albiceps, *Oxyethira*...131, 175
albicornis, *Hydroptila*...44, 81
albuguttata, *Orthotrichia*...306
aldama, *Ochrotrichia*...268
aldricki, *Hydroptila*...44
alexanderi, *Ochrotrichia*...268
algira, *Stactobia*...366
alboma, *Metrichia*...252
alibrachia, *Leucotrichia*...208
aliceae †, *Ochrotrichia*...268
alisensis, *Leucotrichia*...209
Alisotrichia [Leucotrichiinae]...2, 5, 186, 187, 188, 190, 194, 195, 196, 197, 198, 199, 336
Alisotrichiini
[Leucotrichiinae]...2, 5, 12, 186, 187
allagashensis, *Oxyethira*...132
allosi, *Oxyethira*...141
Allotrichia [Hydroptilinae]...2, 5, 22, 25, 28, 31, 32, 81, 181
allynensis, *Hellyethira*...36
alpina, *Stactobia*...366
alsa, *Neotrichia*...225
alsea, *Ochrotrichia*...269
alveata, *Orthotrichia*...306
alysbae, *Neotrichia*...225
alza, *Bredinia*...336
amami, *Stactobiella*...384
amazonensis, *Taraxitrichia*...246
americana, *Ochrotrichia*...
see *americana*,
Orthotrichia...305, 313
americana, *Orthotrichia*...305, 313
amgulil, *Orthotrichia*...306
amieu, *Oxyethira*...132
ammanensis, *Orthotrichia*...306
amnica, *Orthotrichia*...306
amoena, *Hydroptila*...44
amogawarsa, *Plethus*...362
amorfa, *Ochrotrichia*...269
amphapsis, *Acritoptila*...23
amplector, *Neotrichia*...226
amplio, *Neotrichia*...226

- amplitudinis*, *Metrichia*...252
ampoda, *Hydroptila*...45
ampullata †, *Allotrichia*...31
amutiel, *Helyethira*...36
anabola, *Oxyethira*...132
anabua, *Neotrichia*...224, 226
anaua, *Neotrichia*...226
ancistrion, *Hydroptila*...45
Anchitrichia
 [*Leucotrichiinae*]...3, 5, 201
ancora, *Metrichia*...252
andalusiaca, *Hydroptila*...45
anderseni, *Cyclopsiella*...34
anderseni, *Dhatrichia*...35
andicaairnsae, *Orthotrichia*...306
andina, *Oxyethira*...132
andina, *Rhyacopsyche*...296
andreae, *Flintiella*...350, 351
angata, *Dibusa*...250
angelinae, *Leucotrichia*...209
angelus, *Orinocotrichia*...362
angkup, *Chrysotrichia* 344
angra, *Rhyacopsyche*...296
angrisanae, *Ragatrichia*...295
Angrisanioia
 [*Ochrotrichiinae*]...3, 6, 247, 248, 298
angularis, *Ochrotrichia*...269
angulata, *Hydroptila*...45
angulata, *Neotrichia*...226
angulata, *Zumatrichia*...216
angulifera, *Hydroptila*...47
angulosa, *Metrichia*...253
angusta, *Hydroptila*...47
angustata, *Hydroptila*...47, 103
angustella, *Orthotrichia*...304, 306, 307, 313
angustella, *Oxyethira*...132
angustella, *Oxyethira* ... see *ramosa*, *Oxyethira*...163
angustipennis, *Hydroptila*...41, 48
aningalan, *Chrysotrichia*...344
anisca, *Ochrotrichia*...269
anisoforficata, *Metrichia*...253
anisoscyla, *Metrichia*...253
ankasaensis, *Dhatrichia*...35
annulata, *Orthotrichia*...308
annulicornis, *Hydroptila*...48
annulicornis, *Hydroptila*... see *annulicornis*, *Hydroptila*...48
anomala, *Ochrotrichia*...269
anomala, *Paroxyethira*...175
anomaloptera, *Zumatrichia*...216, 217
anongraksa, *Hydroptila*...48
antennata, *Peltopsyche*... 9, 203, 214, 215
antennifera, *Maydenoptila*...251
antennopodia, *Hydroptila*...48
anticheirion, *Metrichia*...253
antilliarum, *Hydroptila*...49
antilliensis, *Zumatrichia*...216, 217
antillularum, *Oxyethira* ... see *tega antillularum*, *Oxyethira*...170
anzuelo, *Neotrichia*...226
aotea, *Xuthotrichia*...185
aoualina, *Stactobia*...366
apalachicola, *Hydroptila*...49, 269
apalachicola, *Ochrotrichia*...49, 269
apicospinosa, *Catoxyethira*...338
apiculata, *Hydroptila*...112
apinolada, *Oxyethira*...133
apophysis, *Orthotrichia*...308
appendiculata, *Bredinia*...336
apsara, *Microptila*...125
aquaecadentis, *Alisotrichia*...188
aquila, *Ithytrichia*...300
araca, *Acostatrichia*...200
araguensis, *Metrichia*...253
arakain, *Niuginitrichia*...353
arala, *Orthotrichia*...308
arantala, *Oxyethira*...133
aranuwa, *Chrysotrichia*...344
arapela, *Chrysotrichia*...344
Aratrichia [*Stactobiinae*]...365, 370
araya, *Oxyethira*...133
arcana, *Alisotrichia*...188
archaica, *Oxyethira*...133
arctia, *Hydroptila*...49, 95
arctodactyla, *Oxyethira*...133
arenifera, *Metrichia*...253
arethusia, *Hydroptila*...49
argentea, *Ochrotrichia*...269
argentinae, *Alisotrichia*...188
argentinea, *Betrichia*...203
argentinea, *Hydroptila*...49
argentinea, *Metrichia*...253, 260
argentiniensis, *Oxyethira*...133
Argentitrichia
 [*Ochrotrichiinae*]...252, 254
argosa, *Hydroptila*...50
argylensis, *Cerasmatrichia*...196
argyricola, *Agraylea*...28
Argyrobothrus [*Oxyethira*]...5, 129, 145, 148, 159, 164, 173, 174
arista, *Neotrichia*...226
arizela †, *Alisotrichia*...188
arizona, *Oxyethira*...133, 138
arizonensis, *Metrichia*...133, 188, 253
arizonica, *Alisotrichia*...133, 188
arizonica, *Ochrotrichia*...133, 270
arkansasensis, *Neotrichia*...226
armata, *Hydroptila*...50
armata, *Neotrichia*...226
armata, *Orthotrichia*...308
armathai, *Hydroptila*...50
armiger, *Chrysotrichia*...344
armitagei, *Neotrichia*...226
arok, *Oxyethira*...134
arranca, *Ochrotrichia*...270
arriba, *Ochrotrichia*...270
artesa, *Hydroptila*...51
artuvillosa, *Oxyethira*...134
arva, *Ochrotrichia*...270
Ascotrichia [*Leucotrichiinae*]...3, 6, 186, 202, 203, 214
asgiriskanda, *Pseudoxyethira*...355
asimetris, *Orthotrichia*...308
aspera, *Oxyethira*...137
assia, *Oxyethira*...144
assita, *Ochrotrichia*...270
asta, *Alisotrichia*...188
asteria, *Hydroptila*...51
astilla, *Flintiella*...351
astratia, *Hydroptila*...51
asymmetrica, *Aenigmatrichia*...24
asymmetrica, *Hydroptila*...51
asymmetrica, *Paroxyethira*...175
atakpamensis,
 Ugandatrichia...181
atalante, *Hydroptila*...51
atargatis, *Hydroptila*...51
ate, *Hydroptila*...51
atezcae, *Ochrotrichia*...270
atiloma, *Ptilocolepus*...394
atlantis, *Microptila*...125
atmena, *Zumatrichia*...217
atopa, *Neotrichia*...227
atra, *Stactobia*...366, 377
atraseta, *Orthotrichia*...308

- attenuata*, *Ochrotrichia*...270
attenuata, *Orthotrichia*...308
attenuata, *Zumatrichia*...217
atugan, *Chrysotrichia*...344
atypica, *Paroxyethira*...175
auge, *Hydroptila*...51
auldorum, *Paroxyethira*...175
aurea, *Stactobia*...365, 366
auriscuspa, *Hydroptila*...52
aurora, *Hydroptila*...52
australiensis, *Oxyethira*...151
australis, *Chrysotrichia*...250, 345
Austratrichia [Hydroptilinae]...2, 5, 22, 23, 34
autonoe, *Hydroptila*...52
avicula, *Ochrotrichia*...270
avicularis, *Orthotrichia*...308
avis, *Ochrotrichia*...271
avon, *Metrichia*...253
ayaya, *Ochrotrichia*...271
ayura, *Leucotrichia*...209
azteca, *Oxyethira*...129, 134, 160
azul, *Metrichia*...254
- B**
- babuyana*, *Hellyethira*...36
bachma, *Chrysotrichia*...345
bademli, *Stactobia*...367
badhami, *Chrysotrichia*...345
badyi, *Catoxyethira*...338
bajgirana, *Hydroptila*...47
balduffi, *Orthotrichia*... see *baldufi*, *Orthotrichia*...308
baldufi, *Orthotrichia*...308
baliana, *Plethus*...362
balin, *Stactobia*...367
Baliotrichia [Orthotrichiinae]...304, 318, 321, 323, 333
ballur, *Stactobia*...367
balra, *Ceratotrichia*...205
balra, *Ochrotrichia*...271
balra, *Orthotrichia*...308
bamaga, *Oxyethira*...134
banchaia, *Plethus*...362
banisbus, *Orthotrichia*...309
banmaekap, *Hydroptila*...52
banra, *Stactobia*...367
baorucoensis, *Ochrotrichia*...271
baotianensis, *Oxyethira*...134
barbalis, *Chrysotrichia*...345
barbarae, *Orphninostrichia*...390
barisan, *Chrysotrichia*...345
baritu, *Neotrichia*...227
baritu, *Oxyethira*...135
barnardi, *Orthotrichia*...309
barnstoni, *Oxyethira*...156
basilobata, *Hellyethira*...37
batang, *Hydroptila*...52
batanta, *Hydroptila*...52
batanta, *Pseudoxxyethira*...355
batanta, *Ugandatrichia*...181
baukis, *Hydroptila*...52
baynesi, *Maydenoptila*...251
beatensis, *Stactobia*...367
becca, *Orthotrichia*...309
befela, *Zumatrichia*...217
befoga, *Alisotrichia*...188
begap, *Hydroptila*...52
bejela, *Microptila*...125
bellicosa, *Orthotrichia*...309
bellini, *Neotrichia*...227
bellona, *Hydroptila*...52
bemeneba †, *Burminoptila* †...388
benambrica, *Orphninostrichia*...390
bencana, *Orthotrichia*...309
bengkoka, *Hydroptila*...52
benguelensis, *Orthotrichia*...309
benji, *Alisotrichia*...188
bensoni, *Orthotrichia*...309
benwa, *Rhyacopsyche*...296
beor, *Stactobia*...367
berbaring, *Orthotrichia*...309
berbulu, *Plethus*...362
bercabanghalus, *Pseudoxxyethira*...356
berduri, *Chrysotrichia*...344, 345
beren, *Stactobia*...367
berkait, *Hydroptila*...52
bernali, *Alisotrichia*...189
berneri, *Hydroptila*...53
berneri, *Oxyethira*...164
bersisik, *Stactobia*...367
bertie, *Orthotrichia*...309
betiri, *Stactobia*...367
Betrichia [Leucotrichiinae]...3, 6, 186, 203, 206, 208
bettyae, *Oxyethira*...135
bevagota, *Zumatrichia*...217
biankii, *Hydroptila*...53
bibir, *Hydroptila*...53
bicaudata, *Ochrotrichia*...271
bickfordae, *Ochrotrichia*...271
bicornuta, *Leucotrichia*...209
bicornuta, *Oxyethira*...135
bidens, *Hydroptila*...53
bidentata, *Metrichia*...254
bidentata, *Oxyethira*...129, 135, 144
bidentata, *Oxyethira*... see *falcata*, *Oxyethira*...143, 144, 145
bienda, *Stactobia*...367
bifida, *Caledonotrichia*...248
bifida, *Neotrichia*...227
bifida, *Zumatrichia*...217
bifur, *Stactobia*...368
bifurca, *Tricholeiochiton*...179
bifurcata, *Hydroptila*...102
bifurcata, *Neotrichia*...227
bifurcata, *Oxyethira*...135
bifurcata, *Tricholeiochiton*... see *bifurca*, *Tricholeiochiton*...179
bika, *Neotrichia*...227
bilah, *Pseudoxxyethira*...356
bilamina, *Acanthotrichia*...22
bilasnating, *Orthotrichia*...309
bilobata, *Orphninostrichia*...391
bilongae, *Catoxyethira*...339
bintik, *Chrysotrichia*...345
biokrotta, *Orthotrichia*...309
bipartita, *Costatrichia*...206
bipartita, *Ochrotrichia*...271
bipartiterga, *Byrsoteryx*...194
bipela, *Orthotrichia*...310
bipunctata, *Dhatrichia*...35
biramosa, *Stactobiella*...383, 384
birdae, *Ochrotrichia*...271
bisetosa, *Alisotrichia*...189
bisetula, *Orthotrichia*...310
bishopi, *Orthotrichia*...310
bishopi, *Plethus*...363
bispina, *Hydroptila*...53
bispinatella, *Hydroptila*...53
bispinosa, *Betrichia*...204
bispinosa, *Pseudoxxyethira*...356
biuncialis, *Hydroptila*...53
biuncifera, *Neotrichia*...227
biungulata, *Metrichia*...254
blahniki, *Cerasmatrichia*...197
blanca, *Ochrotrichia*...271
blantoni, *Mejicanotrichia*...187, 197, 198

- blicklei*, *Hydroptila*...53
blinni, *Neotrichia*...227
bodikatuwa, *Plethus*...363
bofur, *Stactobia*...368
bogambara, *Oxyethira*...135
bogani, *Ochrotrichia*...271
bogos, *Niuginitrichia*...353
bola, *Metrichia*...254
bolyi, *Orthotrichia*...310
bolzei, *Stactobia*...365, 368
bomberi, *Niuginitrichia*...353
bombolensis, *Catoxyethira*...339
boquillas, *Ochrotrichia*...271
bonita, *Metrichia*...254
boraceia, *Flintiella*...351
boreella, *Oxyethira*...144
bosniaca, *Ithytrichia*...300
bostrychion, *Metrichia*...254
botiensis, *Dhatrichia*...35
botka, *Neotrichia*...227
botonia, *Neotrichia*...227
botosaneanui, *Catoxyethira*...339
botosaneanui, *Hydroptila*...54
botosaneanui, *Leucotrichia*...209
botosaneanui, *Stactobia*...376
botvaz, *Stactobia*...368
boydi, *Ochrotrichia*...272
bozontos, *Hydroptila*...54
brachiata, *Orthotrichia*...305
bractea, *Ochrotrichia*...272
bracui, *Metrichia*...254
brailovskyi, *Hydroptila*...54
brasiliana, *Leucotrichia*...209
brasiliensis, *Oxyethira*...136
brayi, *Ochrotrichia*...272
Bredinia [Stactobiinae]...3, 6, 12, 193, 336, 387
brevipenis, *Acostatrachia*...200
brevis, *Oxyethira*...136
brevispina, *Neotrichia*...227
brevitas, *Metrichia*...254
bribriae, *Hydroptila*...54
brigittae, *Hydroptila*...54
brincki, *Hydroptila*...54
brissaga, *Hydroptila*...54, 109
brocha, *Metrichia*...254
brochophora, *Leucotrichia*...209
brodzinskyi †, *Ochrotrichia*...272
broweri, *Hydroptila*...54
browni, *Neotrichia*...227
brukimnamel,
Niuginitrichia...353
brunneicornis, *Hydroptila*...106
brunneicornis, *Ithytrichia*...303
brunneicornis, *Orthotrichia*...307
brustia, *Stactobiella*...383, 384
buborektala, *Acostatrachia*...200
buccata, *Ochrotrichia*...272
bucera, *Orthotrichia*...310
buenoi, *Neotrichia*...228
buenoi, *Ochrotrichia*...272
buenoi, *Oxyethira*...136
bugata, *Hydroptila*...54
bukamak, *Niuginitrichia*...353
bulat, *Hellyethira*...37
bulbosa, *Metrichia*...254
bulbosa, *Rhyacopsyche*...296
bullata, *Neotrichia*...228
bullata, *Orthotrichia*...310
buluhalus, *Pseudoxxyethira*...356
bumbulensis, *Hydroptila*...55
bunkosa, *Orthotrichia*...310
bunkotala, *Rhyacopsyche*...296
burdicki, *Ochrotrichia*...272
buresschi, *Hydroptila*...55
burkina, *Oxyethira*...136
Burminoptila † [Hydroptilidae, incertae sedis]...4, 6, 388
butmasensis, *Orthotrichia*...310
Byrsopteryx [Leucotrichiinae]...2, 5, 193, 194, 195
C
caatinga, *Ochrotrichia*...272
caboca, *Neotrichia*...228
cacaulandia, *Alisotrichia*...189
cachonera, *Ochrotrichia*...272
caesariata, *Hydroptila*...55
cafetalera, *Metrichia*...254
cahaba, *Stactobiella*...384
caimita, *Ochrotrichia*...273
cainguas, *Alisotrichia*...189
calcara, *Hydroptila*...55
calcarata, *Ochrotrichia*...273
calcariga, *Orinocotrichia*...361, 362
caledoniensis, *Oxyethira*...136
Caledonotrichia
[Ochrotrichiinae]...3, 6, 247, 248, 266
caligula, *Ochrotrichia*...273
calin, *Stactobia*...368
calla, *Metrichia*...255
callia, *Hydroptila*...55
calori, *Oxyethira*...136
calundoensis, *Hydroptila*...55
cameria, *Neotrichia*...228
caminopa, *Hydroptila*...55
campana, *Metrichia*...255
campanilla, *Ochrotrichia*...273
campanula, *Oxyethira*...136
campanulata, *Hydroptila*...55
campesina, *Oxyethira*...137
campire, *Stactobia*...368
canicula, *Ochrotrichia*...273
canixa, *Neotrichia*...224, 228
capa, *Orthotrichia*...334
capensis, *Caledonotrichia*...248
capensis, *Hydroptila*...41, 60
caperata, *Hydroptila*...56
capillata, *Orthotrichia*...310
capistra, *Acritoptila*...23
capitana, *Ochrotrichia*...273
capitiana, *Neotrichia*...228
caraca, *Metrichia*...255
carajas, *Flintiella*...351
carajas, *Oxyethira*...137
caramba, *Ochrotrichia*...273
carara, *Costatrachia*...206
carara, *Hydroptila*...56
carbetina, *Metrichia*...255
carioca, *Byrsopteryx*...194
carlsoni, *Neotrichia*...228
carolae, *Anchitrichia*...202
carolae, *Hydroptila*...56
carteri, *Mulgravia*...128
cascadanta, *Oxyethira*...137
caspersi, *Stactobia*...368
catamarcensis, *Hydroptila*...56
cataphanes, *Stactobia*...368
catarina, *Ochrotrichia*...273
cathya, *Ugandatrachia*...181
catichae, *Catoxyethira*...339
Catoxyethira [Stactobiinae]...3, 6, 11, 24, 338, 340, 342
catrimani, *Neotrichia*...228
cauame, *Neotrichia*...228
cautinensis, *Nothotrichia*...267
cavallyi, *Catoxyethira*...339
cavernosa, *Pseudoxxyethira*...356
cavitectum, *Ochrotrichia*...273
caxima, *Neotrichia*...224, 228
cayada, *Neotrichia*...228
cayasana, *Pseudoxxyethira*...356
cazaubonae, *Orthotrichia*...310

- cebollati*, *Angrisanoia*...248
cebollati, *Ochrotrichia*...247, 274
ceer, *Metrichia*...255
ceesi, *Pseudoxyethira*...356
Celaenotrichia
 [Leucotrichiinae]...2, 5, 186, 187, 193, 195, 196, 197, 198
celsus, *Palaeagapetus*...392, 393
celtikci, *Stactobiella*...384
Cerasmatrachia
 [Leucotrichiinae]...3, 5, 187, 196, 197
Ceratotrachia
 [Leucotrichiinae]...3, 6, 204, 205
cermikensis, *Stactobia*...369
cerna, *Acostatrichia*...200
cernyi, *Orthotrichia*...310
chaconi, *Byrsoteryx*...194
chana, *Neotrichia*...229
charadra, *Caledonotrichia*...249
charrua, *Neotrichia*...229
chattanooga, *Hydroptila*...56
chaulioda †, *Ochrotrichia*...274
cheaha, *Hydroptila*...56
chelops, *Hydroptila*...56
chiangdao, *Saranganotrichia*...335
chiapa, *Ochrotrichia*...274
chiasma, *Acritoptila*...23
chichibu, *Stactobia*...369
chichotla, *Rhyacopsyche*...296
chihuahua, *Alisotrichia*...189
chihuahua, *Neotrichia*...229
chilensis, *Neotrichia*...229
chinensis, *Hydroptila*...56
chiquitica, *Alisotrichia*...189
chiriquiensis, *Leucotrichia*...209, 218
chitosea, *Oxyethira*...137
chitwan, *Orthotrichia*...310
chocolocco, *Hydroptila*...62
cholia, *Chrysotrichia*...345
chora, *Microptila*...125
chorra, *Alisotrichia*...189
chrysocara, *Oxyethira*...137
Chrysotrichia [Stactobiinae]...3, 6, 9, 335, 340, 342, 344, 348, 389
cianficconiae, *Stactobia*...369
cibola, *Oxyethira*...159
cieneguilla, *Ochrotrichia*...274
cilamegha, *Plethus*...363
ciliata, *Catoxyethira*...339
cimarrona, *Alisotrichia*...189
cinctigera, *Orthotrichia*...311
cintrana, *Hydroptila*...56
cinyra, *Dhatrichia*...35
circangula, *Hydroptila*...57
circaverna, *Oxyethira*...138
circinata, *Alisotrichia*...189
circulatrix, *Metrichia*...255
circuliforme, *Metrichia*...255
cirrifera, *Oxyethira*...138
citra, *Ochrotrichia*...274
clara †, *Allotrichia*...31
clavata, *Ithytrichia*...300
claviculata, *Orphninostrichia*...391
cliffordi, *Neotrichia*...229
Clymene [Orthotrichiinae]...303, 304
cochisei, *Ochrotrichia*...274
cochlearis, *Hydroptila*...57
coclensis, *Alisotrichia*...189
coercens, *Oxyethira*...138
cognata, *Hydroptila*...57
cognatella, *Agraylea*...25, 27, 28
colchicus, *Ptilocolepus*...394
colei, *Rhyacopsyche*...296
collata, *Neotrichia*...224, 229
collierorum, *Neotrichia*...229
colmillosa, *Neotrichia*...229
colombiana, *Rhyacopsyche*...296
colombiensis, *Neotrichia*...229
colombiensis, *Oxyethira*...138
colubrinosa, *Rhyacopsyche*...296
columba, *Oxyethira*...129, 139
commista, *Maydenoptila*...251
compacta, *Ochrotrichia*...274
complicata, *Oxyethira*...139
concha, *Ochrotrichia*...274
conferta, *Orthotrichia*...311
conformalis, *Ochrotrichia*...274
confusa, *Ochrotrichia*...208, 212, 267, 274
connori, *Neotrichia*...229
consimilis, *Hydroptila*...41, 57
constricta, *Hydroptila*...58
constricta, *Ochrotrichia*...275
constricta, *Orthotrichia*...311
continentalis, *Metrichia*...255
contorta, *Ochrotrichia*...275
contrerasi, *Neotrichia*...230
contrerasi, *Ochrotrichia*...275
contrerasi, *Scelobotrichia*...198, 199
coodei, *Chrysotrichia*...345
copina, *Oxyethira*...139
corazon, *Metrichia*...255
coreana, *Hydroptila*...58
coreana, *Orthotrichia*...311
corneolus, *Ochrotrichia*...275
cornicula, *Alisotrichia*...189
corniculans, *Neotrichia*...230
cornuta, *Hellyethira*...37
cornuta, *Hydroptila*...58
cornuta, *Orthotrichia*...311
cornutata, *Oxyethira*...139
coronata, *Mulgravina*...128
corsicana, *Hydroptila*... see *machlachlani* var. *corsicana*, *Hydroptila*...118, 119
corsicanus, *Hydroptila*... see *machlachlani* var. *corsicana*, *Hydroptila*...119
cortensis, *Hydroptila*...59
coscaroni, *Hydroptila*...59
costalis, *Orthotrichia*...304, 311
costalis, *Oxyethira*...128, 146
costaricensis, *Bredinia*...336
costaricensis, *Oxyethira*...139
costaricensis, *Tizatetrachia*...387
Costatrachia [Leucotrichiinae]...3, 6, 9, 186, 200, 201, 205, 206, 207, 208, 210, 214
costello, *Agraylea*...25
cottaquilla, *Hydroptila*...59
cotula, *Oxyethira*...139
coweetensis, *Hydroptila*...59
crassa, *Stactobia*...365, 369
crenata, *Hydroptila*...41, 59
crenula, *Metrichia*...255
crenulata, *Catoxyethira*...339
cressae, *Costatrachia*...206
cressae, *Hydroptila*...60
cretaria †, *Agraylea* 25
cretosa, *Hydroptila*...60
crinita, *Acritoptila*...23
crinita, *Catoxyethira*...339
criokera, *Hydroptila*...60
cristata, *Orthotrichia*...313
crucecita, *Ochrotrichia*...275
cruces, *Ochrotrichia*...275
cruciata, *Hydroptila*...60
cruciatus, *Plethus*...362, 363
crutwelli, *Orthotrichia*...314
cruviana, *Neotrichia*...230
csavar, *Acritoptila*...23
csiga, *Ochrotrichia*...275
cubana, *Hydroptila*...60, 168

cubitans, *Hellyethira*...37
cuchilla, *Byrsoteryx*...194
cucullata, *Orthotrichia*...314
cuembica, *Hydroptila*...61
cuenca, *Metrichia*...256
cuernita, *Alisotrichia*...190
cuernuda, *Neotrichia*...230
cuernuda, *Oxyethira*...139
culasi, *Stactobia*...369
culebra, *Oxyethira*...139
cumsacculo †, *Agraylea*...25
cuneata, *Hydroptila*...61
cuneola, *Maydenoptila*...250, 251
cuniapiru, *Metrichia*...256
cursitans, *Plethus*...362, 363
curta, *Metrichia*...256, 314
curta, *Orthotrichia*...256, 314
curvata, *Hydroptila*...61
curvata, *Ochrotrichia*...314
curvata, *Orthotrichia*...275
cuspidata, *Metrichia*...256
cuspidatus, *Ochrotrichia*...276
cuspidigera, *Orthotrichia*...314
cyanolenus, *Alisotrichia*...190
cyanotrichia, *Ugandatrichia*...181
Cyclopsiella [Hydroptilinae]...2, 5, 22, 34
Cyllene [Neotrichiinae]...224, 237

D

dactylina, *Agraylea*...26
dactylonedys, *Oxyethira*...139
dactylophora, *Ochrotrichia*...276
Dactylotrichia [*Oxyethira*]...5, 129, 130, 133, 135, 138, 139, 149, 150, 153, 155, 157, 162, 163, 165
dain, *Stactobia*...369
dalmeria, *Oxyethira*...139
damasi, *Orthotrichia*...314
dampfi, *Hydroptila*...61
dampfi, *Orthotrichia*...314
Dampfitrichia [*Oxyethira*]...5, 129, 130, 131, 133, 134, 136, 137, 138, 140, 147, 148, 150, 151, 153, 155, 156, 157, 159, 160, 161, 163, 168, 170, 171, 172, 173, 174
damurida, *Neotrichia*...230
dandik, *Hydroptila*...62
danieli, *Hydroptila*...62

danra, *Stactobiella*...384
dapola, *Orthotrichia*...314
darda, *Acostatrichia*...200
darda, *Hydroptila*...62
dardeni, *Ochrotrichia*...276
darrieti, *Catoxyethira*...339
darvazica, *Stactobia*...369
dasar, *Pseudoxyethira*...356
datra, *Oxyethira*...132, 139
daun, *Hydroptila*...62
davenporti, *Bredinia*...336
dauidi, *Hellyethira*...37
dayung, *Hydroptila*...62
decampeii, *Catoxyethira*...339
decia, *Hydroptila*...62
decora, *Metrichia*...256
decosteri, *Stactobia*...376
decussata, *Saranganotrichia*...334, 335
dejaloni, *Hydroptila*...62
delamarei, *Stactobia*...376
delcourti, *Oxyethira*...140
delgada, *Ochrotrichia*...276
delgadeza, *Neotrichia*...230
delineata, *Hydroptila*...41, 62
delira, *Stactobiella*...384
denaia †, *Ochrotrichia*...276
denningi, *Ochrotrichia*...276
dentata, *Hellyethira*...37
dentata, *Hydroptila*...63
dentata, *Orthotrichia*...314
dentata, *Oxyethira*...144, 145
dentata, *Ugandatrichia*...182
denticulata, *Leucotrichia*...209
denza, *Hydroptila*...63
derek, *Oxyethira*...158
desadorna, *Oxyethira*...140
desertorum, *Hydroptila*...63
desleyae, *Orphninostrichia*...391
deukalion, *Orthotrichia*...315
devestiva, *Costatrichia*...206
dewalti, *Ochrotrichia*...276
Dhatrichia [Hydroptilinae]...2, 5, 22, 25, 34, 35, 125
diabolica, *Neotrichia*...230
diacantha, *Rhyacopsyche*...297
dianeae, *Leucotrichia*...210
Diaulus [Hydroptilidae, incertae sedis]...388
Dibusa [Ochrotrichiinae]...3, 6, 250
Dicaminus [Hydroptilidae, incertae sedis]...4, 6, 388

didii, *Neotrichia*...230
dientera, *Neotrichia*...230
dietrichi, *Costatrichia*...206
dietzi, *Ragatrichia*...295
difusa, *Metrichia*...256
digitata, *Acostatrichia*...200
digitata, *Hellyethira*...37
digitata, *Neotrichia*...230
digitata, *Orthotrichia*...315
digitata, *Oxyethira*...140
digitata, *Pseudoxyethira*...356
dikeros, *Neotrichia*...230
dikirilagoda, *Orthotrichia*...41, 315
dikrosa, *Rhyacopsyche*...297
dilatatus dilatatus, *Ptilocolepus*...395
dilatatus minor, *Ptilocolepus*...395
dilgri, *Orthotrichia*...315
dinamica, *Leucotrichia*...210
diosa, *Metrichia*...256
diplospissa, *Oxyethira*...140
dironga, *Microptila*...125
discaelata, *Oxyethira*...140
discedata, *Orthotrichia*...315
disgalera, *Hydroptila*...63
disjuncta, *Acritoptila*...23
disparilis, *Metrichia*...256
disparilis, *Orthotrichia*...256
distinctella, *Oxyethira*...129, 130, 140
distinguenda, *Stactobia*...369
distorta, *Chrysotrichia*...345
disymetrica disymetrica, *Catoxyethira*...339
disymetrica yaoundeensis, *Catoxyethira*...339
ditalea, *Hydroptila*...63
ditenga, *Orthotrichia*...315
divaricata, *Orthotrichia*...315
divergenta, *Dhatrichia*...35
djalmasantosi, *Neotrichia*...231
djenebae, *Catoxyethira*...339
dodgei, *Hydroptila*...71
doehleri †, *Ochrotrichia*...276, 369
doehleri, *Stactobia*...276, 369
dolichocera, *Pseudoxyethira*...356
Dolotrichia [Neotrichiinae]...224, 228, 231, 245
dominicana, *Hydroptila*...64
dominicensis, *Bredinia*...336, 337

dominicensis,
Cerasmatrichia...196, 197
doppelganger, *Neotrichia*...231
dorcas, *Hydroptila*...64
dori, *Stactobia*...369
dorsalis, *Oxyethira*... see
aegerfasciella,
Orthotrichia...303, 304, 305
dorsennus, *Oxyethira*...141
dorsoprocessuata, *Hydroptila*...64
dostinei, *Jabitrachia*...123
dotalugola, *Chrysotrichia*...345
douporiana, *Ithytrichia*...301
downsi, *Neotrichia*...231
dracanamalama, *Neotrichia*...231
driesseni, *Oxyethira*...141
drosima, *Agraylea*...26
drosima, *Agraylia*... see *drosima*,
Agraylea...26
dualis, *Oxyethira*...141
duatali, *Catoxyethira*...340
dubitans, *Neotrichia*...231
dudosa, *Bredinia*...337
dulce, *Ochrotrichia*...277
dumagnes, *Paroxyethira*...175
dumoga, *Hydroptila*...64
dunbartonensis, *Oxyethira*...142
dundungra, *Orphninostrichia*...391
dunedensis, *Paroxyethira*...176
duplicispina, *Rhyacopsyche*...297
duplifurcata, *Anchitrichia*...202
durin, *Stactobia*...369
durior, *Neotrichia*...231
dwalin, *Stactobia*...369
dwalur, *Stactobia*...370
dzumac, *Paroxyethira*...176

E

eatoni, *Paroxyethira*...176
eatoni, *Stactobiella*...385
eatoniella, *Stactobia*...370
ebroensis, *Hydroptila*...64
echidna, *Orthotrichia*...315
echna, *Chrysotrichia*...345
ecornuta, *Oxyethira*...142, 150
ecuatoriana, *Ochrotrichia*...277
edalis, *Neotrichia*...231
edmondsi, *Tricholeiochiton*...179
edwardsi, *Celaenotrichia*...195,
196

efatensis, *Oxyethira*...142
egba, *Pseudoxyethira*...356
egena, *Orthotrichia*...315
eglinensis, *Hydroptila*...64
eileithyia, *Hydroptila*...64
eiloga, *Niuginotrichia*...353
elawalikanda,
Macrostrachia...389
Electrotrichia † [*Hydroptilidae*,
incertae sedis]...4, 6, 389
elerobi, *Oxyethira*...142
eliaga, *Ochrotrichia*...277
elongata, *Catoxyethira*...340
elongata, *Chrysotrichia*...346
elongata, *Hydroptila*...64
elongata, *Neotrichia*...231
elongiralla, *Ochrotrichia*...277
elora, *Oxyethira*...139
elouardi, *Catoxyethira*...340
eltera, *Metrichia*...256
eltera, *Orthotrichia*...315
elvesta, *Acostatrichia*...200
emarginata, *Bredinia*...337
emarginata, *Hydroptila*...46, 47
englishi, *Hydroptila*...64
engywuck, *Hydroptila*...64
enigmatica, *Metrichia*...256
enigmatica, *Oxyethira*...142
ensiformis, *Orthotrichia*...316
epara, *Peltopsyche*...215
epupae, *Orthotrichia*...316
eramosa, *Hydroptila*...65
erawan, *Hydroptila*...65
eretziana, *Stactobia*...368
ericae, *Stactobia*...370
erkakanae, *Hydroptila*...65
ernstreichli, *Hydroptila*...65
eroga, *Neotrichia*...231
ersitis, *Neotrichia*...231
escalantea, *Ochrotrichia*...277
escoba, *Ochrotrichia*...277
eskensis, *Hellyethira*...37
esmalda, *Neotrichia*...232
espada, *Hydroptila*...67, 76
esparta, *Byrsoteryx*...194
espera, *Metrichia*...256
espinada, *Oxyethira*...143
espinhosa, *Byrsoteryx*...194
espinosa, *Bredinia*...337
espinosa, *Neotrichia*...232
espirita, *Oxyethira*...143

estaquillosa, *Mejicanotrichia*...198
euphrosyne, *Alisotrichia*...190
eurhinata, *Orthotrichia*...316
Eutonella [*Trichoptera*, incertae
sedis]...4, 6, 396
excisa, *Metrichia*...257
excisa, *Oxyethira*...151
exclamationis, *Metrichia*...257
exicoma, *Neotrichia*...232
exigua, *Orthotrichia*...316
Exitrichia [*Neotrichiinae*]...224,
226, 230, 231, 232, 238,
239, 240, 243
explicata, *Hydroptila*...65
explicata, *Maydenoptila*...251
exserta, *Hellyethira*...37
extensa, *Caledonotrichia*...249,
316
extensa, *Orthotrichia*...249, 316
extensor, *Stactobia*...370
extensus, *Ptilocolepus*...395
extragma, *Metrichia*...257
extragna, *Metrichia*...253
extraordinaria, *Leucotrichia*...210
extrema, *Hydroptila*...65
eyipantla, *Ochrotrichia*...277
ezoensis, *Hydroptila*...61
ezoensis, *Oxyethira*...143

F

fagesii, *Tricholeiochiton*...30, 179
fahija, *Stactobia*...370, 378
fairchildi, *Cerasmatrichia*...204,
205
fairchildi, *Leucotrichia*...210
falca, *Neotrichia*...232
falcata, *Oxyethira*...130, 143,
147
falcifera, *Neotrichia*...232
falsa, *Leucotrichia*...210
farkoska, *Neotrichia*...232
farofo, *Metrichia*...257
fasciata, *Catoxyethira*...338, 340
favus, *Metrichia*...257
felfela, *Hydroptila*...65
felgorba, *Cerasmatrichia*...205
felina, *Tricholeiochiton*...180
feliipe, *Ochrotrichia*...277
felkurta, *Neotrichia*...232
feltuna, *Orthotrichia*...316

- femoralis*, *Phrixocoma*... see
tineoides, *Hydroptila*...113, 114
femoralis var. *longispina*,
Hydroptila... see *tineoides*,
Hydroptila...113, 114
feolai, *Neotrichia*...232
feredougoubae, *Microptila*...125
ferni, *Ithytrichia*...300, 301
ferreirae, *Orthotrichia*...316
fethiyensis, *Stactobia*...370
fidelis, *Tricholeiochiton*...180
fijiensis, *Oxyethira*...145
filacea, *Stactobia*...370
filifera, *Neotrichia*...232, 272
filiforma, *Ochrotrichia*...278
fimbriata, *Acostatrichia*...200
fimbriata, *Hellyethira*...37
fimbriata, *Orthotrichia*...316
finisorientis, *Palaeagapetus*...393
fioka, *Ochrotrichia*...278
fiorii, *Hydroptila*...65
fischeri, *Oxyethira*...169
fischeri, *Stactobia*...370
fiskei, *Hydroptila*...65
flabella, *Orthotrichia*...316
flabellifera, *Agraylea*...30, 179
flagellata, *Ochrotrichia*...278
flagellata, *Oxyethira*...145
flagellum, *Jabitrachia*...124
flavicomma, *Cerasmatrichia*...205
flavicornis, *Oxyethira*...11, 128, 130, 145, 146, 147
flavida, *Agraylea*...28
flexura, *Ochrotrichia*...278
flexus, *Palaeagapetus*...393
flinti, *Costatrichia*...206
flinti, *Hydroptila*...65
flinti, *Rhyacopsyche*...297
flinti, *Zumatrichia*...218
flintiana, *Alisotrichia*...190
flintiana, *Ochrotrichia*...278
Flintiella [Stactobiinae]...3, 6, 12, 350, 361
florecita, *Metrichia*...257
florestani, *Hydroptila*...66
florida, *Oxyethira*...147
flowersi, *Neotrichia*...233
fluminensis, *Acostatrichia*...201
fogaka, *Neotrichia*...233
fonalka, *Orthotrichia*...316, 323
fonensis, *Catoxyethira*...340
fonkouae, *Catoxyethira*...340
fonsorontina, *Hydroptila*...66
fontinala, *Orthotrichia*...316
fontismoreau, *Metrichia*...257
footei, *Ochrotrichia*...278
forceps, *Metrichia*...257
forcipata, *Hydroptila*...41, 66, 147, 371
forcipata, *Oxyethira*...147
forcipata, *Stactobia*...371
forficata, *Acritoptila*...23
forficata, *Hellyethira*...38
formosae, *Catoxyethira*...340
formosinha, *Metrichia*...257
forrota, *Leucotrichia*...210
forsslundi, *Stactobia*...371
fortensis, *Tricholeiochiton*...179, 180
fortificata, *Orthotrichia*...317
fortunata, *Hydroptila*...67, 75, 76
foruma, *Orthotrichia*...317
fosla, *Orthotrichia*...317
fossi, *Ochrotrichia*...278
foumbani, *Catoxyethira*...340
fowlesi, *Hydroptila*...68
fragilis, *Orthotrichia*...317
fraterna, *Agraylea*...28
freyi, *Stactobia*...371
frici, *Oxyethira*...143, 147
friedeli, *Hydroptila*...68
frigoris, *Ugandatrichia*...182
froki, *Stactobia*...371
frontalis, *Ascotrichia*...202, 203
fualtaldeal, *Hydroptila*...68
fuellejalona, *Oxyethira*...173
fuentelarbola, *Hydroptila*...68
fugga, *Metrichia*...257
fukuensis, *Palaeagapetus*...393
fulika, *Cerasmatrichia*...197
fulminea, *Leucotrichia*...210
funatsuki, *Pseudoxyethira*...126, 357
fundorai, *Alisotrichia*...190
funereus, *Ptilocolepus*...396
furcata, *Hydroptila*...41, 68
furcata, *Orthotrichia*...317
furcata, *Stactobia*...365, 371
furcilla, *Hydroptila*...68, 393
furcilla †, *Palaeagapetus*...68, 393
furcula, *Hydroptila*...68
furtiva, *Hydroptila*...68
fuscicornis, *Stactobia*...365, 371
fuscina, *Hydroptila*...68
- ## G
- gabriel*, *Alisotrichia*...190
gajah, *Chrysotrichia*...346
galaica, *Allotrichia*...31
galekoluma, *Oxyethira*...151
gandhara, *Hydroptila*...68
ganjil, *Chrysotrichia*...346
gapdoi, *Hydroptila*...69
garbunga, *Orthotrichia*...317
gariepensis, *Catoxyethira*...340
garifosa, *Oxyethira*...148
garra, *Neotrichia*...233
garrinichai, *Neotrichia*...233
garuhape, *Ragatrichia*...295
gaya, *Hydroptila*...69
geminata, *Metrichia*...258
geminata, *Oxyethira*...148
geniel, *Hydroptila*...69
genka, *Microptila*...125
gerigi, *Pseudoxyethira*...357
germani, *Stactobia*...371
gerutu, *Stactobia*...372
giama, *Hydroptila*...69
giampaolina, *Alisotrichia*...190
giboni, *Catoxyethira*...340
giboni, *Dhatrichia*...340
gilaensis, *Neotrichia*...233
gilmari, *Neotrichia*...233
gilva, *Orphninostrichia*...391
gimli, *Stactobia*...372
gimouae, *Catoxyethira*...340
gingoog, *Hydroptila*...69
giudicellii, *Catoxyethira*...340
giudicellorum, *Hydroptila*...69
glabra, *Ochrotrichia*...278
gladia, *Neotrichia*...233
glaesaria †, *Agraylea*...26
glandulosa, *Pseudoxyethira*...355, 357
glasa, *Oxyethira*...148
glebula, *Orthotrichia*...317
glesumica †, *Novajersey* †...389, 390
globosa, *Acritoptila*...22, 23
gloin, *Stactobia*...372
glossocercus, *Acritoptila*...24

- Gnathotrichia*
[Hydroptilinae]...129, 151
goiana, *Metrichia*...258
gomboska, *Metrichia*...258
gomera, *Oxyethira*...169
gomerina, *Stactobia*...372
gomezi, *Byrsoteryx*...195
gomezi, *Leucotrichia*...211
gorbek, *Orthotrichia*...317
gordita, *Metrichia*...258
gotera, *Neotrichia*...233
gozmanyi, *Stactobia*...372
graboensis, *Catoxyethira*...340
gracilenta, *Paroxyethira*...178
graciliano, *Oxyethira*...149
gracilis, *Orthotrichia*...317
grandiosa, *Hydroptila*...70
granulatus, *Ptilocolepus*...12, 13, 394, 395
grannulatus, *Ptilocolepus* ... see
granulatus, *Ptilocolepus*...395
graysoni, *Ochrotrichia*...278
grehani, *Neotrichia*...233
grenadensis, *Hydroptila*...70
gressitti, *Orthotrichia*...317
gretae, *Ochrotrichia*...279
grisea, *Oxyethira*...149
grolin, *Stactobia*...372
grucheti, *Hydroptila*...70
guadalupensis, *Ochrotrichia*...279
guadeloupea, *Alisotrichia*... see
orophila guadeloupea,
Alisotrichia...192
guanacasteca, *Bredinia*...337
guariba, *Oxyethira*...149
gudiel, *Orthotrichia*...317
Guerrottrichia [*Neotrichia*]...224, 228
guinkoi, *Orthotrichia*...317
gunda, *Hydroptila*...70
gunma, *Stactobia*...372
guppyi, *Palaeagapetus*...393
gura, *Catoxyethira*...341
gurdi, *Hydroptila*...71
gurneyi, *Ochrotrichia*...279
guruluhela, *Orthotrichia*...318
gwili, *Stactobia*...372
- H**
- hacha*, *Chrysotrichia*...346
hadria, *Ochrotrichia*...279
hagenii, *Rhyacopsyche*...295, 296, 297
hailana, *Chrysotrichia*...346
hainanensis, *Oxyethira*...136
hairanga, *Ugandatrichia*...182
haitimlain, *Hellyethira*...38
hajla, *Neotrichia*...233
hajla, *Orthotrichia*...318
hajtoka, *Rhyacopsyche*...297
halia, *Neotrichia*...233
halus, *Hydroptila*...71
hamata, *Hydroptila*...71, 93
hamata, *Paroxyethira*...176
hamatilis, *Microptila*...125
hamatilis, *Ochrotrichia*...279
hamatus, *Acritoptila*...24
hamiltoni, *Hydroptila*...72
hamistyla, *Hydroptila*...72
hamulifera, *Costatrichia*...206
hanulva, *Orthotrichia*...318
hapitigola, *Chrysotrichia*...346
haranga, *Metrichia*...258
harma, *Flintiella*...351
harmas, *Niuginitrichia*...353
harmas, *Ochrotrichia*...279
haromsog, *Niuginitrichia*...353
harpagella, *Oxyethira*...149
harpagula, *Hydroptila*...72
harpeodes, *Hydroptila*...72
harpeodes, *Oxyethira*...149
harrisi, *Anchitrichia*...202, 351
harrisi, *Flintiella*...351
harrisi, *Neotrichia*...234
harrisi, *Mejicanotrichia*...198
hartigi, *Oxyethira*...149
hasta, *Rhyacopsyche*...297
hata, *Ochrotrichia*...279
hatnagola, *Chrysotrichia*...344, 346
hattorii, *Stactobia*...372
helicina, *Hydroptila*...79
heleios, *Neotrichia*...234
helenae, *Metrichia*...258
Hellyethira [*Hydroptilinae*]...2, 5, 23, 34, 36, 37, 40, 128, 131
helmali, *Hydroptila*...72
hena, *Oxyethira*...150
hendersoni, *Paroxyethira*...175, 176
heredia, *Flintiella*...351
hermani, *Chrysotrichia*...346
heterocera, *Allotrichia*...31
hexalocha, *Pseudoxyethira*...358
hiana, *Hellyethira*...40
hiaspa, *Neotrichia*...225, 234
hidala, *Cerasmatrichia*...197
hilosa, *Oxyethira*...150
hinchuna, *Plethus*...363
hinipitigola, *Orthotrichia*...318
hintama, *Microptila*...126
hintoni, *Paroxyethira*...176
hippomenes, *Orthotrichia*...318
hiroshima, *Oxyethira*...150
hirra, *Hydroptila*...60
hirsuta, *Hydroptila*...72
hirudopsis aitija,
Alisotrichia...190
hirudopsis hirudopsis,
Alisotrichia...190
hispaniolina, *Alisotrichia*...190
hispida, *Leucotrichia*...211
hochyangha, *Hydroptila*...72
hodkova, *Hydroptila*...72
hoffmannae, *Hydroptila*...73
holaga, *Orthotrichia*...318
Holarctotrichia [*Oxyethira*]...5, 129, 133, 137, 140, 142, 152, 153, 155, 158, 164, 166
holzenthali, *Alisotrichia*...191
holzenthali, *Anchitrichia*...202
holzenthali, *Hydroptila*...73
holzenthali, *Rhyacopsyche*...297
homochitta, *Hydroptila*...73
homora, *Niuginitrichia*...353
hondurenia, *Ochrotrichia*...279
honeyi, *Ochrotrichia*...279
honga, *Ugandatrichia*...182
horgos, *Chrysotrichia*...346
horgoska, *Neotrichia*...234
hossa, *Hydroptila*...73
hosulaba, *Acostatrichia*...200
houailou, *Oxyethira*...150
hougardi, *Catoxyethira*...341
howelli, *Hydroptila*...73
hozosa, *Oxyethira*...150
huaihuat, *Orthotrichia*...318
huaivat, *Hydroptila*...73
Huayptila [*Orthotrichiinae*]...334, 335
hubenovi, *Hydroptila*...69
hughwilsoni, *Paroxyethira*...176
hunukani, *Dhatrichia*...35
huor, *Stactobia*...372

hurin, *Stactobia*...372

butapadangensis,

Chrysotrichia...346

huzva, *Niuginitrichia*...354

hyalina, *Oxyethira*...150

Hydropneuma

[*Hydroptilinae*]...41, 67

Hydroptila [*Hydroptilinae*]...2, 4, 5, 7, 9, 11, 12, 21, 22, 30, 34, 40, 41, 77, 81, 107, 115, 123, 127, 128, 131, 145, 178, 179, 185, 246, 291, 296, 303, 306, 307, 311, 340, 361, 362, 363, 365, 366, 371, 390

Hydroptilidae...2, 4, 5, 7, 8, 10, 11, 12, 13, 14, 21, 22, 247, 248, 250, 266, 295, 334, 388, 390, 392, 394, 396

Hydroptilina [*Hydroptilinae*]...41, 48

Hydroptilinae

[*Hydroptilidae*]...2, 4, 5, 10, 11, 12, 13, 21, 22, 24, 124, 178, 184, 187, 247, 389, 390

hydroptiloides, *Orthotrichia*...318

Hydrorchestia

[*Hydroptilinae*]...25, 26

hyllus, *Hydroptila*...73

hystricosa, *Ascotrichia*...203

I

iannuzzae, *Oxyethira*...150

icona, *Hydroptila*...73

idefix, *Hydroptila*...74

ifugao, *Orthotrichia*...318

iglesiassi, *Oxyethira*...150

igrapiuna, *Ochrotrichia*...279

ikal, *Oxyethira*...150

ikaros, *Microptila*...126

ildria, *Ochrotrichia*...279

illiesi, *Caledonotrichia*...248, 249

illiesi, *Nothotrichia*...266, 267

iloui, *Catoxyethira*...341

imitator, *Leucotrichia*...211

imparalobata, *Hellyethira*...38

improcera, *Catoxyethira*...341

inaequalis, *Costatrichia*...206

inaequispina, *Oxyethira*...151

inasa, *Dhatrichia*...34, 35

incana, *Oxyethira*...151

incertula, *Hydroptila*...74

incompta, *Catoxyethira*...341

incurvata, *Oxyethira*...151

indah, *Orthotrichia*...318

indefinida, *Ochrotrichia*...280

indica, *Orthotrichia*...318

indorsennus, *Oxyethira*...151

indra, *Microptila*...126

inexpectata, *Stactobia*...372

inflaticornis, *Leucotrichia*...211

ingloria, *Ochrotrichia*...280

innokentiya, *Microptila*...126

inops, *Leucotrichia*...211

inornata, *Hydroptila*...74

inornata, *Orthotrichia*...319

intortigona, *Neotrichia*...238

insignis, *Hydroptila*...89

instabilis, *Orthotrichia*...319

insubrica, *Hydroptila*...74

insularis, *Agraylea*...26

insularis, *Ochrotrichia*...267, 271, 280

insularis, *Oxyethira*...151

insularis, *Pseudoxylethira*...357

intermedia, *Ochrotrichia*...280

intermedia, *Stactobia*...372

interrupta, *Leucotrichia*...211

interrupta, *Neotrichia*...234

intortilis, *Ochrotrichia*...280

intraspina, *Rhyacopsyche*...297

intropertica, *Wlitrachia*...185

introspinata, *Hydroptila*...74, 107

involuta, *Ochrotrichia*...280

iomara, *Chrysotrichia*...346

ion, *Hydroptila*...8, 74

ipixuna, *Costatrichia*...206

iridescent, *Neotrichia*...234

iriga, *Orthotrichia*...319

iriomotensis, *Orthotrichia*...319

isabellae, *Hydroptila*...75

isabellina, *Oxyethira*...129, 151

ishiharai, *Pseudoxylethira*...357

islenia, *Ochrotrichia*...280

ismayi, *Niuginitrichia*...354

ismetla, *Neotrichia*...234

itabaiana, *Metrichia*...258

itascas, *Oxyethira*...152

Ithytrichia [*Orthotrichiinae*]...3, 6, 7, 11, 181, 184, 208, 212, 267, 274, 299, 300, 303, 307, 334

itintikah, *Orthotrichia*...319

itoi, *Hydroptila*...61

ives, *Niuginitrichia*...354

ivisa, *Hydroptila*...75

ixcateopana, *Ochrotrichia*...281

ixtlahuaca, *Ochrotrichia*...281

J

jabirella, *Tricholeiochiton*...180

Jabitrachia [*Hydroptilinae*]...2, 5, 22, 34, 123, 124, 178

jackmanni, *Hydroptila*...75

jacquemarti, *Stactobia*...373

jamaicae, *Metrichia* ...see

kumanskii jamaicae,

Metrichia...258

jamaicensis, *Oxyethira*...129, 152

jamin, *Hydroptila*...75

janella, *Oxyethira*...152

jani, *Orthotrichia*...319

japonica, *Stactobia*...365, 373

jari, *Pseudoxylethira*...357

jarochita, *Neotrichia*...234

jaruma, *Hydroptila*...75

Javanotrichia

[*Orthotrichiinae*]...303, 314, 322, 335

jeannae, *Hydroptila*...75

jembatana, *Orthotrichia*...319

jethran, *Orthotrichia*...319

jimena, *Rhyacopsyche*...298

jobbra, *Cerasmatrichia*...205

jolandae, *Ochrotrichia*...281

jonssoni, *Ochrotrichia*...281

jorobada, *Metrichia*...258

josifovi, *Oxyethira*...132, 140

juani, *Metrichia*...235

juani, *Neotrichia*...235

juba, *Hydroptila*...41, 67, 75, 76

judithae, *Hydroptila*...76

juntada, *Neotrichia*...235

juram, *Hydroptila*...76

justini, *Orphninothrichia*...391

K

kabaenica, *Orthotrichia*...319

kagyla, *Betrachia*...204

kairos, *Hydroptila*...76

kait, *Pseudoxylethira*...357

kaitica, *Orthotrichia*...320

kakatu, *Pseudoxylethira*...357

- kakida*, *Oxyethira*...132, 140
kakidaensis, *Hydroptila*...76
kala, *Plethus*...363
kalchas, *Hydroptila*...76
kalengiensis, *Orthotrichia*...320
kalisa, *Orthotrichia*...320
kalonichtis, *Hydroptila*...76
kamoro, *Stactobiella*...385
kampa, *Neotrichia*...235
kampoka, *Neotrichia*...235
kanagawa, *Stactobia*...373
kanikar, *Ugandatrichia*...182
kantala, *Alisotrichia*...191
kanukua, *Alisotrichia*...191
kaonan, *Orthotrichia*...320
kaosoidao, *Saranganotrichia*...334, 335
kaputensis, *Stactobia*...373
karika, *Acritoptila*...23
karikatla, *Hydroptila*...77
karima, *Hydroptila*...77
kaschgari, *Hydroptila*...77
kasyi, *Orthotrichia*...321
kateae, *Leucotrichia*...211
kebawah, *Hydroptila*...77
kebumen, *Ugandatrichia*...182
kebelia, *Neotrichia*...235
Kelleyella [*Oxyethira*]...129
kelleyi, *Oxyethira*...153
keluk, *Stactobia*...373
kenyella, *Pseudoxyethira*...357
kerdmuang, *Ugandatrichia*...182
kerek, *Oxyethira*...153
kerekded, *Orthotrichia*...320
keres, *Hydroptila*...77
kesken, *Niuginitrichia*...354
ketaga, *Ochrotrichia*...281
ketaguka, *Neotrichia*...235
ketarca, *Ochrotrichia*...281
kettes, *Ochrotrichia*...281
ketvilla, *Costatrichia*...207
kevera, *Alisotrichia*...191
khakaeng, *Catoxyethira*...341
Kholaptila [*Hydroptilinae*]...2, 5, 22, 124
kholoensis, *Orthotrichia*...320
khonga, *Hydroptila*...77, 115
khukri, *Hellyethira*...38
kieneri, *Hydroptila*...77
kihara, *Acostatrichia*...201
kimi, *Neotrichia*...235
kimminsi, *Hydroptila*...89
kimminsi, *Paroxyethira*...176
kimminsi, *Stactobia*...373
kinabalu, *Orthotrichia*...320
kingi, *Oxyethira*...153
kipas, *Pseudoxyethira*...357, 361
kirikiriroa, *Oxyethira*...153
kirilawela, *Hydroptila*...77
kisbunka, *Orthotrichia*...320
kitae, *Neotrichia*...235
kivuensis, *Orthotrichia*...320
kiziroglui, *Stactobia*...373
kjaerandseni, *Paroxyethira*...178
klapaleki, *Stactobia*...373
klapperichi, *Hydroptila*...78
klingstedti, *Oxyethira*...153
klongpod, *Stactobia*...374
kocka, *Metrichia*...258
koegi, *Paroxyethira*...176
kokodana, *Orthotrichia*...304, 320
kondratieffi, *Ochrotrichia*...281
koropa, *Hydroptila*...78
koryaki, *Hydroptila*...78
kourinioni, *Catoxyethira*...341
kover, *Niuginitrichia*...354
kreusa, *Hydroptila*...78
krungut, *Orthotrichia*...320
kudung, *Stactobia*...374
kuehnei, *Hydroptila*...78
kukensis, *Hellyethira*...38
kumejima, *Stactobiella*...385
kumiskucinga, *Catoxyethira*...341
kunenensis, *Orthotrichia*...320
kunenica, *Catoxyethira*...341
kumanskii, *Hydroptila*...98, 258
kumanskii jamaicae, *Metrichia*...258
kumanskii kumanskii, *Metrichia*...258
kurnas, *Hydroptila*...43
kunkora, *Missitrichia*...127
kurandica, *Maydenoptila*...251
kuringbat, *Ugandatrichia*...182
kurta, *Neotrichia*...235
kurta, *Pseudoxyethira*...358
kurtika, *Neotrichia*...235
kurtitva, *Neotrichia*...235
kurukepitiya, *Hydroptila*...78
kurukut, *Niuginitrichia*...354
kyria, *Stactobia*...374
kyushuensis, *Palaeagapetus*...393
L
labafura, *Ochrotrichia*...281
labios, *Neotrichia*...235
lacandona, *Hydroptila*...78
lacertina, *Neotrichia*...236
lacuna, *Metrichia*...259
lacustris, *Hellyethira*...38, 180
lacustris, *Tricholeiochiton*...38, 180
ladik, *Pseudoxyethira*...358
ladislavii, *Dicaminus*...388
laerma, *Allotrichia*...31
Lagenopsyche
 [*Hydroptilinae*]...129, 130, 150, 169
lagoi, *Hydroptila*...78
lagunita, *Oxyethira*...153
laitimtok, *Pseudoxyethira*...358
laloka, *Hydroptila*...78
lalonduwasi, *Orthotrichia*...320
lamellaris, *Ithytrichia*...299, 300, 301, 303, 307
Lamonganotrichia
 [*Stactobiinae*]...11, 335, 365, 369
lampai, *Pseudoxyethira*...358
lampai, *Ugandatrichia*...182
lanceolata, *Catoxyethira*...341, 385
lanceolata, *Stactobiella*...341, 385
lanna, *Orthotrichia*...321
laoana, *Chrysotrichia*...347
laodameia, *Oxyethira*...163
lapka, *Orthotrichia*...316
laposka, *Leucotrichia*...211
laposka, *Orthotrichia*...321
larimar, *Ochrotrichia*...281
latifilis, *Hydroptila*...78
latipalpis, *Alisotrichia*...191
latiramifera, *Orthotrichia*...321
latosa, *Hydroptila*...78
laurenceae, *Catoxyethira*...341
lavitra, *Stactobia*...374
lebar, *Orthotrichia*...321
lefela, *Neotrichia*...236
legeza, *Ochrotrichia*...282
lekoban, *Stactobia*...374
leloga, *Flintiella*...351
lelouma, *Catoxyethira*...341

- lemeza*, *Angrisanoia*...248
lemniscata, *Metrichia*...259
lennoxii, *Hydroptila*...79
lenophora, *Metrichia*...259
lenora, *Hydroptila*...79
lentiginosa †, *Agraylea*...26
lentigo, *Orthotrichia*...321
leona, *Ochrotrichia*...282
leonensis, *Neotrichia*...236
leonensis, *Oxyethira*...164
leptocera, *Hydroptila*...79
leptoclada, *Stactobia*...374
lerabae, *Dhatrichia*...35
lerma, *Leucotrichia*...211
Leucotrichia
 [*Leucotrichiinae*]...3, 6, 9,
 11, 186, 199, 200, 201, 202,
 203, 204, 205, 208, 210,
 212, 214, 215, 216, 220
Leucotrichiinae
 [*Hydroptilidae*]...2, 4, 5, 10,
 11, 12, 21, 186, 187, 194,
 196, 199, 201, 202, 203,
 336, 365, 396
Leucotrichiini
 [*Leucotrichiinae*]...3, 5, 12,
 186, 187, 193, 199, 210
levanti, *Hydroptila*... see *mendli*
levanti, *Hydroptila*...84
levis, *Pseudoxyethira*...358
leynarti, *Catoxyethira*...341
libanica, *Hydroptila*...79
licina, *Hydroptila*...79
licini, *Pseudoxyethira*...358
lidah, *Hydroptila*...79
ligula, *Orthotrichia*...321
likliklang, *Chrysotrichia*...347
limacabanga, *Chrysotrichia*...347
limeirai, *Ochrotrichia*...282
limpia, *Leucotrichia*...209, 212
limonensis, *Ochrotrichia*...282
linghia, *Vietrichia*...184
lingigi, *Hydroptila*...79
linterna, *Alisotrichia*...191
lironga, *Chrysotrichia*...347
litai, *Pseudoxyethira*...358
litita, *Hellyethira*...38
litoralis, *Orthotrichia*...304, 321
litoris, *Orthotrichia*...321
litotes, *Orthotrichia*...322
litua, *Hellyethira*...38
livadia, *Stactobia*...374
lloganae, *Hydroptila*...79
lobata, *Alisotrichia*...191
lobata, *Neotrichia*...236
lobifera, *Ochrotrichia*...282
lobophora, *Oxyethira*...137
lobophorana, *Orthotrichia*...322
lodora, *Costatrichia*...205, 206,
 207
logana, *Ochrotrichia*...282
lohoueae, *Catoxyethira*...342
loja, *Byrsoteryx*...195
loki, *Stactobia*...374
lometa, *Ochrotrichia*...282
lonchera, *Hydroptila*...80
longidorsalis, *Hydroptila*...80
longifilis, *Hydroptila*...80
longipenis, *Oxyethira*...153
longiphallata, *Metrichia*...259
longispina, *Hydroptila*...114
longispina, *Metrichia*...259
longispina, *Ochrotrichia*...282
longispinosa, *Oxyethira*...153,
 157
longissima, *Hydroptila*...80
longissima, *Metrichia*...259
longissima, *Neotrichia*...236
longissima, *Oxyethira*...129, 154
longissimus, *Hydroptila*... see
 longissima, *Hydroptila*...80,
 129, 154, 236, 259
longistyla, *Betrichia*...204
longitabularis, *Hydroptila*... see
 longidorsalis, *Hydroptila*...80
longitudinis, *Metrichia*...259
loni, *Stactobia*...374
loripes, *Hellyethira*...38
Lorotrichia [*Neotrichiinae*]...225,
 234
losida, *Hydroptila*...41, 80
lotensis, *Hydroptila*...58, 80
Loxotrichia [*Oxyethira*]...5, 129,
 134, 137, 139, 148, 149,
 152, 160, 162, 163, 170,
 175, 185
luanae, *Oxyethira*...154
lucia, *Ochrotrichia*...283
lucrecia, *Neotrichia*...236
lumipollex, *Oxyethira*...154
lumosa, *Oxyethira*...154
luna, *Metrichia*...259
luonga, *Orthotrichia*...322
lupita, *Ochrotrichia*...283
lurida †, *Oxyethira*...154
luzofortificata, *Orthotrichia*...322
luzonensis, *Hydroptila*...81
lyaios, *Hydroptila*...81
M
maai, *Hellyethira*...38
macae, *Alisotrichia*...191
macdonaldi, *Metrichia*...259
machiguenga, *Ochrotrichia*...283
machlachlani, *Hydroptila*...118
machlachlani var. *corsicana*,
 Hydroptila...119
machlachlani, *Stactobia*... see
 mclachlani, *Stactobia*...376
machlachlani,
 Tupiniquintrichia...118, 119
mackayi, *Orthotrichia*...322
macropennis, *Oxyethira*...154
macroballata, *Metrichia*...259
macrospina, *Acritoptila*...24
Macrostactobia [*Hydroptilidae*,
 incertae sedis]...4, 6, 335,
 389
macrosterna, *Oxyethira*...154
maculata, *Hydroptila*...81
maculata, *Orphnintrichia*...390,
 391
maculata, *Stactobia*...374
macuxi, *Neotrichia*...236
madagascarensis, *Dhatrichia*...36
madagassa, *Orthotrichia*...322
madicola, *Metrichia*...260
Madioxyethira
 [*Stactobiinae*]...335, 355,
 357, 358, 359, 360, 361
mador, *Pseudoxyethira*...358
madre, *Metrichia*...260
maeandrica, *Orthotrichia*...303,
 322
maetalai, *Hydroptila*...82
Maeyaptila [*Hydroptilinae*]...2,
 5, 22, 124
Maetalaiptila [*Stactobiinae*]...3,
 6, 336, 352
maga, *Ochrotrichia*...283
magna, *Metrichia*...260
mabisindha, *Orthotrichia*...322

- makaplag*, *Hydroptila*...82
makartschenkoi, *Stactobia*...373, 375
makunaima, *Neotrichia*...236
malacantosa, *Stactobia*...375
malacitana, *Hydroptila*...82
malada, *Metrichia*...260
malanae, *Ochrotrichia*...283
malayana, *Pseudoxyethira*...358
mali, *Catoxyethira*...338, 342
malickyi, *Neotrichia*...236
malickyi, *Stactobia*...375
maliwan, *Ugandatrichia*...183
malleoforma, *Hellyethira*...38
manabiensis, *Bredinia*...337
manapouri, *Paroxyethira*...176
manauara, *Flintiella*...351
manavgatensis, *Hydroptila*...82
manensis, *Ugandatrichia*...183
mangyanica, *Stactobia*...375
manopla, *Neotrichia*...236
manuensis, *Ochrotrichia*...283
maoae, *Hydroptila*...82
maranhensis, *Oxyethira*...154
maratya, *Chrysotrichia*...347
margalitana, *Stactobia*...375
margaretae, *Acritoptila*...23, 24
margaritena, *Neotrichia*...236
margemiring, *Catoxyethira*...342
maria, *Neotrichia*...236
mariatheresae, *Hydroptila*...82
marica, *Ochrotrichia*...219, 283
marigbellai, *Hydroptila*...82
marinkovicae, *Allotrichia*...32
marioch, *Hellyethira*...38
maritza, *Hydroptila*...82
marlieri, *Stactobia*...375
marshallae, *Stactobiella*...385
marshalli, *Pseudoxyethira*...358
marsyas, *Orthotrichia*...322
martini, *Hydroptila*...82
martorelli, *Hydroptila*...83
martynovi, *Stactobia*...365, 375
martynovi, *Stactobiella*...385
maryae, *Oxyethira*...154
mas, *Orthotrichia*...322
masola, *Orthotrichia*...322
mastelleri, *Metrichia*...260
matadero, *Oxyethira*...155
matakail, *Chrysotrichia*...347
mathisi, *Alisotrichia*...191
mathisi, *Neotrichia*...237
matsuii, *Hydroptila*...94
matthiasi, *Rhyacopsyche*...298
matula, *Neotrichia*...237
maya, *Neotrichia*...237
maya, *Ochrotrichia*...283
maya, *Oxyethira*...155
maycoba, *Ochrotrichia*...283
Maydenoptila
 [Ochrotrichiinae]...3, 6, 247, 250, 251
mayeri, *Stactobia*...376
maza, *Hydroptila*...83
mazon, *Ithytrichia*...303
mazumbaiensis, *Hydroptila*...83
mcgregori, *Oxyethira*...155
mclachlani, *Hydroptila*...
 see *machlachlani*,
Hydroptila...118, 119
mclachlani, *Stactobia*...119, 376
mcpferoni, *Neotrichia*...237
mechuda, *Metrichia*...260
media, *Orphninostrichia*...391
medinai, *Hydroptila*...83
medipitigola, *Orthotrichia*...323
Mejicanotrichia
 [Leucotrichiinae]...3, 5, 187, 197, 198
mekunna, *Oxyethira*...155
melanella, *Pseudoxyethira*...358
melanoptera, *Pseudoxyethira*...359
melasma, *Oxyethira*...155
melia, *Hydroptila*...83
melitta, *Orthotrichia*...323
melleopicta, *Leucotrichia*...208, 212
membrana, *Ochrotrichia*...283
menara, *Chrysotrichia*...347
menarika, *Orthotrichia*...323
mencenga, *Orthotrichia*...323
mendli levanti, *Hydroptila*...84
mendli mendli, *Hydroptila*...84
menjonkok, *Orthotrichia*...323
mentonensis, *Neotrichia*...237
meralda, *Hydroptila*...84
merga, *Oxyethira*...155
meridionalis, *Oxyethira*...173
Mesotrichia [Hydroptilinae]...5, 129, 131, 148, 152, 158, 165
meta, *Metrichia*...260
metoeca, *Hydroptila*...84
Metrichia [Ochrotrichiinae]...3, 6, 247, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 268, 295, 296, 298, 388
metteei, *Hydroptila*...84
mexicana, *Bredinia*...337
mexicana, *Hydroptila*...84
mexicana, *Ithytrichia*...303
mexicana, *Rhyacopsyche*...296, 298
meysi, *Orthotrichia*...323
michaeli, *Neotrichia*...237
michiganensis, *Oxyethira*...155
micropotamis, *Hydroptila*...85
Microptila [Hydroptilinae]...2, 5, 22, 35, 124, 125, 178, 181, 184, 386
Microsiphon [Neotrichiinae]...224
miea, *Oxyethira*...156
mienica, *Oxyethira*...156
milinda, *Pseudoxyethira*...355, 359
militsa, *Allotrichia*...32
milka, *Pseudoxyethira*...359
minalwang, *Orthotrichia*...323
mindamontana, *Hydroptila*...85, 93
mindanaensis,
Ugandatrichia...183
mindanaoensis,
Pseudoxyethira...359
mindorica, *Stactobia*...376
mindoroensis,
Ugandatrichia...183
minera, *Metrichia*...260
minima, *Oxyethira*...129, 156
minor, *Caledonotrichia*...248, 249
minor, *Ptilocolepus*... see
dilatatus minor,
Ptilocolepus...395
minor, *Ugandatrichia*...181, 183
minuta, *Caledonotrichia*...249
minuta, *Dhatrichia*...35, 36
minutisimella, *Neotrichia*...224, 225, 237
minutissima, *Microptila*...125, 126
minutula, *Chrysotrichia*...347
mirabilis, *Oxyethira*...129, 130, 156
mirebalina, *Oxyethira*...153, 157, 168
mirebalina, *Oxyethira*... see
simulatrix, *Oxyethira*...153, 157, 168

miresa, *Stactobia*...376
mirifica, *Byrsopteryx*...193, 194, 195
miselia, *Pseudoxyethira*...359
misionensis, *Oxyethira*...157
misolba, *Hydroptila*...85
Missitrichia [Hydroptilinae]...2, 5, 22, 127
mithi, *Oxyethira*...157
mitirigalla, *Hydroptila*...85
mlamboi, *Orthotrichia*...323
mobilensis, *Neotrichia*...238
mocoi, *Oxyethira*...157
modica, *Hydroptila*...85
mojavensis, *Neotrichia*...238
mokowu, *Hydroptila*...85
molione, *Hydroptila*...112
molsonae, *Hydroptila*...85
momanga, *Orthotrichia*...316, 323
monga, *Chrysotrichia*...347
monga, *Orthotrichia*...323
monnioti, *Stactobia*...376
mono, *Ochrotrichia*...284
montatan, *Hydroptila*...85
morettii, *Stactobia*...376
morogorensis, *Hydroptila*...85
morpheus, *Hydroptila*...86
morsei, *Hydroptila*...79
morula, *Orthotrichia*...323
Moselyella [Hydroptilinae]...181, 183, 184
moselyi, *Hydroptila*...86
moselyi, *Mayatrichia*...224
moselyi, *Ochrotrichia*...284
moselyi, *Orthotrichia*...324
moselyi, *Stactobia*...377
motminh, *Hydroptila*...86
mouensis, *Catoxyethira*...342
mouirange, *Oxyethira*...157
moxica, *Hydroptila*...86
mucajai, *Neotrichia*...238
muellita, *Alisotrichia*...191
mugla, *Hydroptila*...86
mulehe, *Orthotrichia*...324
Mulgravia [Hydroptilinae]...2, 5, 22, 23, 128
multiguttata, *Agraylea*...28
multilobata, *Hellyethira*...38
multipunctata, *Agraylea*...25, 26, 28, 29
munieca, *Metrichia*...260
munozii, *Nothotrichia*...267

murtlei, *Hydroptila*...86
muscari, *Orthotrichia*...324
mussoi, *Orthotrichia*...324
mutica, *Leucotrichia*...212
mutica, *Stactobiella*...386
mutisi, *Rhyacopsyche*...296, 298
myersae, *Ochrotrichia*...284
N
nacora, *Ochrotrichia*...284
nago, *Hydroptila*...86
naili, *Stactobia*...377
nakama, *Microptila*...126
nakijinensis, *Ugandatrichia*...183
nalin, *Stactobia*...377
nambelensis, *Hydroptila*...86
namcattien, *Hydroptila*...86
namelbanis, *Niuginitrichia*...354
namnao, *Orthotrichia*...324
namnao, *Ptilocolepus*...396
namorona, *Catoxyethira*...342
nana, *Pseudoxyethira*...359, 361
Nanoagraylea † [*Agraylea*]...5, 25, 26, 28
nanseiensis, *Hydroptila*...86
napoensis, *Neotrichia*...238
narakain, *Hellyethira*...39
narifer, *Hydroptila*...87
nasuli, *Hydroptila*...87
naumanni, *Hellyethira*...39
navicularis, *Ugandatrichia*...182
nearcticus, *Palaeagapetus*...393
neblina, *Alisotrichia*...191
neboissi, *Austratrichia*...34
neciel, *Hydroptila*...87
necopina, *Metrichia*...260
neglecta, *Hydroptila*...48
neglecta, *Oxyethira*...152
negroensis, *Neotrichia*...238
negsog, *Niuginitrichia*...354
nehega, *Orthotrichia*...324
nehoue, *Oxyethira*...157
nelsonferreirai, *Costatrichia*...207
nematomorpha,
Ochrotrichia...284
nemtomp, *Hydroptila*...87
neoleonensis, *Hydroptila*...87
neotropicalis, *Metrichia*...180, 260
neotropicalis,
Tricholeiochiton...180, 260
nepalensis, *Pseudoxyethira*...359

nesiotes, *Neotrichia*...238
nessimiani, *Alisotrichia*...192
nessos, *Orthotrichia*...324
newi, *Orthotrichia*...324
ngaythibaya, *Hydroptila*...87
nhundiaquara, *Betrichia*...204
nicaragua, *Ochrotrichia*...284
nicoli, *Hydroptila*...87
nielsenii, *Stactobia*...365, 377
nigra, *Ugandatrichia*...183
nigrispina, *Paroxyethira*...177
nigritta, *Metrichia*...251, 252, 261
nigrovalvata, *Hydroptila*...87
nigrovillosa, *Orthotrichia*...324
nikataruwa, *Ugandatrichia*...183
nikolayi, *Pseudoxyethira*...359
nikulinae, *Stactobiella*...386
niltonsantosi, *Neotrichia*...238
nimmoi, *Ochrotrichia*...284
nishimotoi, *Stactobia*...377
Niuginitrichia [Stactobiinae]...3, 6, 353
noite, *Costatrichia*...207
noldi, *Stactobia*...377
nontaburi, *Orthotrichia*...324
nori, *Stactobia*...377
noteuna, *Neotrichia*...238
Nothotrichia
 [Ochrotrichiinae]...3, 6, 247, 250, 266, 267
nova, *Orthotrichia*...324
Novajerseyi † {Hydroptilidae, incertae sedis}...4, 6, 389, 390
novara, *Neotrichia*...238
novasota, *Oxyethira*...157
novicola, *Hydroptila*...87
nowaczyki, *Metrichia*...261
numii, *Neotrichia*...233
nusagandia, *Hydroptila*...87
nusam, *Missitrichia*...127, 128
nybomi, *Stactobia*...366, 377
nyultka, *Oxyethira*...158
nyurga, *Caledonotrichia*...249
nzoi, *Catoxyethira*...342
O
oakmulgeensis, *Hydroptila*...88
obliqua, *Rhyacopsyche*...298
oblongata, *Ochrotrichia*...284
obovata, *Ochrotrichia*...285

- obscura*, *Hydroptila*...65, 88
obscura, *Orthotrichia*...325
obscura, *Oxyethira*...158
obscura, *Stactobia*...371
obtatus, *Oxyethira*...158
obtecta, *Ochrotrichia*...285
obtecta, *Orthotrichia*...325
occidentalis, *Betrichia*...204
occulta, *Hydroptila*...41, 82, 88
ocellata, *Catoxyethira*...342
ochracea, *Xuthotrichia*...185
Ochrotrichia
 [Ochrotrichiinae]...3, 6, 197, 247, 248, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 273, 274, 278, 279, 280, 282, 283, 284, 285, 286, 292, 295, 296, 305
Ochrotrichiinae
 [Hydroptilidae]...3, 4, 6, 10, 21, 247, 248, 250, 251, 266, 267
Oeceotrichia [Hydroptilinae]...41, 64
oemerueneli, *Hydroptila*...89
ogasawaraensis, *Hydroptila*...89
oguranis, *Hydroptila*...90
oin, *Stactobia*...378
okaloosa, *Hydroptila*...90
okaloosa, *Ochrotrichia*...285
okanoganensis, *Ochrotrichia*...285
okinawa, *Oxyethira*...158
oknos, *Hydroptila*...90
okopa, *Neotrichia*...238
oldala, *Ochrotrichia*...285
oldalia, *Neotrichia*...239
oldalra, *Saranganotrichia*...335
olelo, *Orthotrichia*...325
olgae, *Stactobia*...378
olorina, *Neotrichia*...239
ombeensis, *Catoxyethira*...342
oneili, *Hydroptila*...90
opposita, *Paroxyethira*...177
ops, *Orthotrichia*...325
orbostensis, *Orthotrichia*...325
oredonensis, *Stactobia*...370
oregona, *Ochrotrichia*...285
orejona, *Neotrichia*...239
orellanai, *Oxyethira*...158
ori, *Stactobia*...378
orias, *Orthotrichia*...325
orientalis, *Allotrichia*... see *vilnensis orientalis*, *Allotrichia*...33
Orientalitrichia
 [Stactobiinae]...355
orienthula, *Microptila*...127
originis, *Orphninostrichia*...391
Orinocotrichia [Stactobiinae]...3, 6, 12, 336, 361
orion, *Hydroptila*...90
orlandoi, *Neotrichia*...239
ornithocephala, *Hydroptila*...90
oropedion, *Oxyethira*...129, 158
orophila guadeloupea, *Alisotrichia*...192
orophila orophila, *Alisotrichia*...192
Orphninostrichia [Hydroptilidae, incertae sedis]...4, 6, 390
ortaca, *Hydroptila*...90
Orthotrichia
 [Orthotrichiinae]...3, 4, 6, 7, 8, 11, 36, 124, 128, 146, 159, 168, 212, 237, 246, 251, 261, 299, 300, 303, 304, 306, 311, 316, 334, 366
Orthotrichiella
 [Orthotrichiinae]...304, 327
Orthotrichiinae
 [Hydroptilidae]...3, 4, 6, 10, 11, 21, 267, 299
ortizorum, *Oxyethira*...158
osa, *Hydroptila*...90
osmena, *Neotrichia*...239
ostoros, *Orthotrichia*...325
ostoroska, *Ochrotrichia*...285
otarosa, *Angrisanoia*...248
ouachita, *Hydroptila*...90
ouenghi, *Oxyethira*...158
ouenghica, *Acritoptila*...24
ouinnica, *Caledonotrichia*...249
ovacikensis, *Hydroptila*...91
ovatus, *Palaeagapetus*...394
ovona, *Neotrichia*...239
oxima, *Neotrichia*...240
Oxydroptila [Hydroptilinae]...41, 68, 77
Oxyethira [Hydroptilinae]...2, 4, 5, 7, 11, 22, 24, 34, 61, 123, 128, 129, 130, 131, 132, 134, 135, 136, 137, 138, 139, 140, 142, 143, 145, 147, 149, 150, 153, 154, 155, 156, 157, 158, 159, 161, 162, 163, 164, 165, 166, 167, 169, 170, 171, 172, 174, 175, 179, 180, 185, 190, 305, 311, 365, 390
Oxytrichia [*Oxyethira*]...5, 129, 130, 131, 132, 133, 135, 139, 140, 141, 151, 153, 154, 156, 158, 160, 161, 168, 173, 174
ozarkensis, *Paroxyethira*...177, 178
ozea, *Oxyethira*...159
P
pacatoria, *Stactobia*...370, 378
pacifica, *Ochrotrichia*...285
Pacificotrichia [*Oxyethira*]...5, 129, 140, 141, 142, 145, 151, 155, 157, 158, 162, 164, 165, 168
padera, *Leucotrichia*...212
paieon, *Oxyethira*...137
pakitza, *Metrichia*...261
paku, *Pseudoxyethira*...359
Palaeagapetinae
 [Ptilocolepidae]...13, 392
Palaeagapetus
 [Ptilocolepidae]...4, 6, 8, 11, 12, 13, 392
palaestinae, *Hydroptila*...91
palida, *Metrichia*...261
palikos, *Orthotrichia*...325
palisada, *Oxyethira*...159
palitla, *Neotrichia*...240
palitla, *Ochrotrichia*...285
pallicornis, *Allotrichia*...31, 32
pallida, *Flintiella*...351
pallida, *Oxyethira*...130, 159
pallidula, *Agraylea*...30, 179
pallu, *Chrysotrichia*...347
palma, *Neotrichia*...240
palmata, *Ochrotrichia*...286
palmata, *Stactobiella*...383, 386
palmate, *Stactobiella*... see *palmata*, *Stactobiella*...383, 386
palmatiloba, *Anchitrichia*...202
paludicola, *Oxyethira*...160
pamelae, *Neotrichia*...240

- panama*, *Nothotrichia*...267
panamensis, *Alisotrichia*...192
panamensis, *Costatrichia*...207
panamensis, *Flintiella*...352
panamensis, *Ochrotrichia*...286
panamensis, *Tizatetrichia*...387
panayana, *Chrysotrichia*...347
panchaoi, *Hydroptila*...91
panneus, *Neotrichia*...239
papillata, *Orphninostrichia*...391
para, *Orthotrichia*...325
parabullata, *Neotrichia*...240
parachelops, *Hydroptila*...91
paradenza, *Hydroptila*...91
parakampsis, *Hydroptila*...91
paralatosia, *Hydroptila*...91
paraldama, *Ochrotrichia*...286
paralella, *Acritoptila*...24
parallelica, *Stactobiella*...386
paramartha, *Oxyethira*...136
paraminuta, *Dhatrichia*...36
paramoena, *Hydroptila*...91
paranga, *Orthotrichia*...325
parany, *Neotrichia*...240
paraokopa, *Neotrichia*...240
parapiculata, *Hydroptila*...92
Parastactobia [Stactobiinae]...335, 338, 340, 341, 342, 343, 389
parastrepha, *Hydroptila*...92
Paratrachia
 [Ochrotrichiinae]...247, 248, 274
paraxella, *Hydroptila*...92
parazteca, *Oxyethira*...160
parce, *Oxyethira*...160
parhuzam, *Hydroptila*...92
parinsularis, *Oxyethira*...160
paritentacula, *Oxyethira*...160
Paroxyethira [Hydroptilinae]...2, 5, 22, 36, 175, 185
parthava, *Hydroptila*...89
paruparu, *Chrysotrichia*...347
parva †, *Agraylea*...28, 378
parva, *Stactobia*...28, 378
parvus, *Palaeagapetus*...394
pasak, *Microptila*...127
paschia, *Hydroptila*...92
Pasirotrichia [Hydroptilinae]...41, 59
patagonica, *Metrichia*...261
parthenopaios, *Orthotrichia*...325
parthenos, *Orthotrichia*...326
patriciae, *Hydroptila*...92
patulosa, *Ochrotrichia*...286
Paucicalcaria [Hydroptilinae]...2, 5, 22, 177, 185
paxilla, *Alisotrichia*...192
pearsoni, *Acritoptila*...24
pecos, *Hydroptila*...92
pectinata, *Leucotrichia*...212
pectinata, *Ochrotrichia*...286
pectinella, *Orthotrichia*...326
pectinifera, *Hydroptila*...92
pectinifera, *Ochrotrichia*...286
pedemontana, *Hydroptila*...85, 92
pelei, *Neotrichia*...240
Peltopsyche [Leucotrichiinae]...3, 6, 9, 203, 214, 215, 216
peltopsychoides, *Eutonella*...396
peluda, *Metrichia*...262
pembertonensis, *Oxyethira*...160
penicillata, *Metrichia*...262
pennya, *Tricholeiochiton*...180
pentheseleia, *Hydroptila*...93
pentheseleia, *Orthotrichia*...326
pequenita, *Neotrichia*...240
perdita, *Hydroptila*...93
peregai, *Niuginitrichia*...354
perignonica, *Oxyethira*...161
perimele, *Hydroptila*...93
pernambucana, *Metrichia*...262
perplexa, *Hydroptila*...93
persephone, *Orthotrichia*...326
peruviana, *Oxyethira*...161
peruviana, *Rhyacopsyche*...298
pescadori, *Oxyethira*...161
petei, *Oxyethira*...161
pethericki, *Orthotrichia*...326
petiti, *Orthotrichia*...326
phaiaaka, *Chrysotrichia*...348
phaon, *Hydroptila*...93
phenianica, *Hydroptila*...94
phenosa, *Ochrotrichia*...286
phileos †, *Hydropila*...94
phix, *Stactobia*...378
phoeniciae, *Hydroptila*...94
Phrixocoma [Hydroptilinae]...41, 44, 66, 88, 96, 105, 114, 371
piala, *Hellyethira*...39
picada, *Neotrichia*...241
picita, *Oxyethira*...161
pictipes, *Leucotrichia*...208, 212
picuda, *Metrichia*...262
pierpointorum, *Neotrichia*...241
pika, *Acostatrichia*...200
pilcopata, *Bredinia*...337
pinarenia, *Neotrichia*...241
ping, *Oxyethira*...161, 311
pinheyi, *Catoxyethira*...342
pinnacles, *Neotrichia*...241
pintal, *Hydroptila*...94
piring, *Chrysotrichia*...348
pirisinui, *Oxyethira*...161
pisau, *Chrysotrichia*...348
pitu, *Metrichia*...262
pizotensis, *Flintiella*...352
planichela, *Acritoptila*...24
platigona, *Metrichia*...262
plaumanni, *Acostatrichia*...199, 201
plethoides, *Stactobia*...378
Plethotrichia [Stactobiinae]...11, 335, 362
Plethus [Stactobiinae]...3, 6, 11, 335, 344, 353, 362, 363, 365, 383, 389
plumosa, *Orphninostrichia*...391
plumosa, *Oxyethira*...161
poapi, *Oxyethira*...162
poblana, *Ochrotrichia*...286
poecilostola, *Chrysotrichia*...348
poirrieri, *Hydroptila*...94
polybos, *Stactobia*...378
polybymnia, *Orthotrichia*...326
Polytrichia
 [Ochrotrichiinae]...267, 268, 269, 270, 274, 275, 277, 280, 282, 284, 285, 289, 290, 291, 292, 293, 294
polyxena, *Orthotrichia*...326
ponta, *Ochrotrichia*...223, 224, 286
pora, *Ochrotrichia*...286
pornsawan, *Chrysotrichia*...348
portunus, *Hydroptila*...95
poseidon, *Hydroptila*...95
potomus, *Ochrotrichia*...287
potosina, *Hydroptila*...49, 95
potosina, *Metrichia*...262
pougouaeae, *Catoxyethira*...342
pounamu, *Paroxyethira*...177
prenna, *Orthotrichia*...326
presilla, *Oxyethira*...162
prevoti, *Orthotrichia*...326
priamos, *Hydroptila*...95
priapo, *Ochrotrichia*...287

- priapos*, *Orthotrichia*...326
prima, *Catoxyethira*...338, 342
princesa, *Stactobia*...378
proboscidea, *Neotrichia*...241
procera, *Tuipiniquintrichia*...216
producta, *Hydroptila*...95
profunda, *Scelobotrichia*...199
prokeris, *Hydroptila*...95
prolata, *Metrichia*...262
prolixa, *Metrichia*...263
protera, *Hydroptila*...95
protrudens, *Metrichia*...263
provosti, *Ochrotrichia*...287
pseudofalcata, *Oxyethira*...162
pseudomeralda, *Hydroptila*...60
pseudopatagonica,
Metrichia...263
pseudorupina,
Maydenoptila...251
Pseudoxyethira [Stactobiinae]...3, 6, 24, 335, 355
pseudseirene, *Hydroptila*...95
psyche, *Hydroptila*...96
Ptilocolepidae
[Hydroptilidae]...4, 6, 7, 8, 10, 12, 13, 14, 21, 392
Ptilocolepinae [Ptilocolepidae]...4, 11, 12, 13, 392
Ptilocolepus [Ptilocolepidae]...4, 6, 8, 11, 12, 13, 392, 394
pucat, *Pseudoxyethira*...360
puertoricensis, *Oxyethira*...162
pulchricornis, *Hydroptila*...11, 41, 96
pulestoni, *Hydroptila*...97
pulgara, *Neotrichia*...241
pulgara, *Ochrotrichia*...287
pullata, *Hydroptila*...97
pulmonaria, *Chrysotrichia*...348
pulvina, *Hellyethira*...39
puposa, *Ochrotrichia*...287
putoei, *Orthotrichia*...327
puyana, *Ochrotrichia*...287
pyramus, *Maetalaiptila*...352
pyreneus, *Hydroptila*...97
pyrrhos, *Stactobia*...378
pythia, *Hydroptila*...97
python, *Stactobia*...378
- Q**
- quadrata*, *Hellyethira*...39,
quadrata, *Metrichia*...263
quadrata, *Oxyethira*...162
quadrifida, *Hydroptila*...97
quadrilobata, *Oxyethira*...162
quadrispina, *Ochrotrichia*...287
quadrispina, *Stactobia*...379
quasi, *Ochrotrichia*...287
quebrada, *Ochrotrichia*...287
quelinda, *Oxyethira*...162
quemada, *Scelobotrichia*...187, 199
quezonensis, *Stactobia*...379
quinaria, *Hydroptila*...97
quinealensis, *Ochrotrichia*...287
quinola, *Hydroptila*...97
quinguaginta, *Oxyethira*...162
quiramae, *Oxyethira*...162
quirinus, *Chrysotrichia*...348
quitauau, *Neotrichia*...241
- R**
- rachanee*, *Oxyethira*...163
radovanovici, *Stactobia*...379, 380
rafaeli, *Metrichia*...263
rafaeli, *Oxyethira*...163
ragada, *Ragatrichia*...295
Ragatrichia [Ochrotrichiinae]...3, 6, 247, 295
rahang, *Stactobia*...379
rahel, *Hydroptila*...97
rambala, *Neotrichia*...241
ramifera, *Paroxyethira*...177
ramona, *Ochrotrichia*...288
ramosa, *Hellyethira*...39
ramosa, *Oxyethira*...163
ranauana, *Orthotrichia*...304, 327
ranea, *Neotrichia*...245
raposa, *Ochrotrichia*...288
rara, *Mejicanotrichia*...198
rareza, *Oxyethira*...163
rasmussen, *Neotrichia*...241
rastrilla, *Hydroptila*...98
rawlinsi, *Metrichia*...263
rayada, *Byrsoteryx*...195
razanamiadanae,
Catoxyethira...343
recurva, *Hydroptila*...106
recurvata, *Hydroptila*...98
reducta, *Hydroptila*...98
redunca, *Oxyethira*...163
regia, *Orphnnotrichia*...391
regina, *Ochrotrichia*...288
regiomontana, *Ochrotrichia*...288
regularis, *Stactobia*...379
remita, *Hydroptila*...98
rentzi, *Orthotrichia*...327
repanda, *Leucotrichia*...213
reticulata, *Stactobia*...379
retracta, *Oxyethira*...163
retrosa, *Oxyethira*...163
rhamphisa, *Rhyacopsyche*...298
rheni, *Hydroptila*...98
rhodani, *Oxyethira*...145
rhodesiensis, *Ugandatrichia*...181, 183
rhodica, *Hydroptila*...98
rhomba, *Leucotrichia*...213
rhombica, *Stactobia*...379
Rhyacopsyche
[Ochrotrichiinae]...3, 6, 247, 248, 286, 295, 296, 298
rhynchophyllum, *Allotrichia*...33
riegeli, *Neotrichia*...241
rienki, *Pseudoxyethira*...360
riesi, *Ochrotrichia*...288
rincorama, *Pseudoxyethira*...360
rinjani, *Microptila*...127
Rioptila [Leucotrichiinae]...187, 188, 196
rioustoumae, *Leucotrichia*...213
riparia, *Neotrichia*...242
risi, *Stactobiella*...386, 387
risiana, *Stactobia*...379
ritae, *Oxyethira*...163
riva, *Metrichia*...263
rivicola, *Oxyethira*...130, 164
roberta, *Hydroptila*...98
roberti, *Oxyethira*...164
robisoni, *Catoxyethira*...343
robisoni, *Ochrotrichia*...288
robusta, *Hydroptila*...99
roma, *Hydroptila*...99
rona, *Metrichia*...263
rono, *Hydroptila*...99
roperi, *Hydroptila*...99
roreta, *Plethus*...363
rossi, *Oxyethira*...164
rostrata, *Orthotrichia*...327
rothi, *Ochrotrichia*...288
rotundata, *Neotrichia*...242
rotundatus †, *Palaeagapetus*...392, 394
roudra, *Microptila*...127
rougensis, *Oxyethira*...164

rouna, Niuginitrichia...354
rovatka, Betrichia...204
rovid, Hellyethira...39
rovidka, Costatrichia...207
ruben, Hydroptila...99
ruffoi, Hydroptila...99
rugoka, Alisotrichia...192
rugosa, Orphninitrichia...391
ruiteri, Neotrichia...242
rumpun, Hydroptila...99
rumpun, Pseudoxyethira...360
running, Orthotrichia...327
running, Macrostactobia...389
rupina, Maydenoptila...251
ruthiel, Stactobia...379
ruvuensis, Catoxyethira...343

S

sabazios, Orthotrichia...327
sabit, Hydroptila...100
sacculifera, Metrichia...263
sagitta, Ochrotrichia...289
sagittifera, Oxyethira...164
saimbeyli, Hydroptila...100
sala, Neotrichia...242
salada, Neotrichia...242
salaris, Ochrotrichia...289
salmakis, Stactobia...379
salmo, Hydroptila...100
saltesea, Agraylea...29
sanana, Ugandatrichia...183
sandersoni, Hydroptila...100
sandersoni, Neotrichia...242
sandya, Neotrichia...242
sanghala, Hydroptila...100
santarosa, Hydroptila...100
santiagensis, Oxyethira...129, 165
santosi, Costatrichia...207
sanya, Orthotrichia...327
sapimarere, Niuginitrichia...354
sarae, Paroxyethira...177
sarabae, Hydroptila...101
saranganica, Pseudoxyethira...355, 360
Saranganotrichia
 [Orthotrichiinae]...3, 6, 299, 334
sarina, Hellyethira...39
sarita, Leucotrichia...210, 213
sarkos, Hydroptila...101
sarkos, Plethus...363
sauca, Hydroptila...101

savanniensis, Oxyethira...165
savegra, Metrichia...264
savoska, Orthotrichia...327
scaeodactyla, Oxyethira...165
scamandra, Hydroptila...101
scaevola, Plethus...363
Scelobotrichia
 [Leucotrichiinae]...3, 5, 187, 198, 199
Scelotrichia [Stactobiinae]...124, 355, 356, 357, 358, 359, 360, 361, 371
scheiringi, Hydroptila...101
schmidi, Alisotrichia...192
schmidi, Pseudoxyethira...360
schmidi, Stactobia...379
schnorri, Stactobia...379, 380
scolops, Hydroptila...101
scopulina, Oxyethira...165
scutata, Orthotrichia...327
scutellata, Orthotrichia...327
scutica, Oxyethira...165
sechellensis, Oxyethira...166
sederhana, Hydroptila...101
segitiga, Hydroptila...101
segitiga, Plethus...364
seiba, Ochrotrichia...289
seirene, Hydroptila...101
seki, Stactobia...380
selaput, Hellyethira...39
selene, Hydroptila...102
selva, Bredinia...337
selvatica, Hydroptila...102
semele, Stactobia...380
sencilla, Metrichia...264
sencilla, Oxyethira...166
sengavi, Hydroptila...102
sentisa, Hellyethira...39
separata, Metrichia...264
septempunctata, Byrsoteryx...195
septentrionalis, Catoxyethira...
 see *veruta septentrionalis*,
 Catoxyethira...344
septentrionalis, Oxyethira...166
sepulga, Neotrichia...242
serra, Ochrotrichia...289
serrana, Flintiella...289, 352
serrana, Ochrotrichia...289, 352
serrata, Hydroptila...102
serrata, Kholaptila...124
serrata, Neotrichia...242
serrata, Orthotrichia...327
serrata, Oxyethira...166

serrata, Paroxyethira...177
serrula, Chrysotrichia...348
sesquipetalis, Metrichia...264
setigera, Alisotrichia...192
setigera, Hydroptila...102
setigera, Hydroptila... see
cottaquilla, Hydroptila...59
setosa, Oxyethira...166
sexmaculata, Agraylea...25, 26, 29
shahdara, Stactobia...380
shasta, Nothotrichia...267
shawkah, Orthotrichia...327
shawnee, Ochrotrichia...267, 289
sheldoni, Hellyethira...39
shikokuensis, Palaeagapetus...394
shimigaya, Orthotrichia...328
shinshiroensis,
 Ugandatrichia...184
shorti, Rhyacopsyche...298
shumari, Oxyethira...166
sibuyan, Orthotrichia...328
sichuanensis, Oxyethira...166
sicilicula, Neotrichia...242
sida, Oxyethira...167
sidneyi, Leucotrichia...213
sidong, Hydroptila...102
sieboldi, Peltopsyche...214, 215
sierruca, Oxyethira...167
sigiama, Plethus...364
signata, Agraylea...28
sikanda, Hydroptila...102
silicis, Orphninitrichia...392
silicula, Hydroptila...103
silva, Ochrotrichia...289
simanka, Oxyethira...167
similis, Metrichia...264
simoma, Ascotrichia...203
simples, Metrichia...264
simplex, Chrysotrichia...348
simplex, Costatrichia...206, 207
simplex, Hellyethira...36, 39
simplex, Hydroptila...103
simplex, Oxyethira...130, 167
simplex, Pseudoxyethira...360
simulans, Acostatrichia...200, 201
simulans, Hydroptila...103
simulauica, Hydroptila...104
simulatrix, Oxyethira...157, 168
simulatrix cubana, Oxyethira...168
singri, Hydroptila...104
singularis, Oxyethira...168
sininsigne, Oxyethira...168
sinistra, Oxyethira...168

- sinit*, *Orthotrichia*...328
sinuosa, *Chrysotrichia*...348
sinuosa, *Hydroptila*...104
siribhum, *Stactobiella*...387
siriya, *Chrysotrichia*...349
sitahoan, *Hydroptila*...104
sivka, *Orthotrichia*...328
skamandros, *Chrysotrichia*...349
skylla, *Hydroptila*...104
smoli, *Stactobia*...380
smolpela, *Oxyethira*...168
snori, *Stactobia*...380
snufi, *Stactobia*...380
sodalis, *Oxyethira*...156
sokaga, *Neotrichia*...242
soleaferrea, *Neotrichia*...242
solisi, *Byrsoteryx*...195
solzhenitsyni, *Stactobiella*...385
sonora, *Alisotrichia*...192
sonora, *Metrichia*...264
sonora, *Neotrichia*...243
sourya, *Ugandatrichia*...184
spada, *Hydroptila*...104
spangleri, *Anchitrichia*...201, 202
spangleri, *Ascotrichia*...203
spangleri, *Bredinia*...337
spangleri, *Hydroptila*...104
sparsa, *Hydroptila*...41, 103, 105
sparta, *Chrysotrichia*...349
spathifera †, *Agraylea*...31
spatulata, *Hydroptila*...107
specana, *Orthotrichia*...328
Sperotrichia [Stactobiinae]...338, 342
sphinx, *Hydroptila*...107
spica, *Metrichia*...264
spicifera, *Stactobia*...380
spicula, *Oxyethira*...168
spina, *Ochrotrichia*...289
spinata, *Hydroptila*...107
spinata, *Ugandatrichia*...183
spinicauda, *Orthotrichia*...328
spinifera, *Acostatrichia*...201
spinifera, *Catoxyethira*...343
spinifera, *Costatrichia*...207
spinifera, *Oxyethira*...169
spinosa, *Cerasmatrichia*...196, 197
spinosa, *Helyethira*...40
spinosa, *Hydroptila*...74, 107
spinosa, *Ochrotrichia*...289
spinosella, *Oxyethira*...169
spinosissima, *Ochrotrichia*...290
spinula, *Ochrotrichia*...290
spinulata, *Ochrotrichia*...290
spinulosa, *Ochrotrichia*...290
spira, *Ochrotrichia*...290
spiralina, *Orthotrichia*...328
spiralis, *Hydroptila*...107
spirogyrae, *Oxyethira*...129, 130, 169
spirula, *Hydroptila*...108
spirulatella, *Hydroptila*...108
spissa, *Oxyethira*...169
spurcaria, *Hydroptila*...108
squamigera, *Metrichia*...264
squamosa, *Orphninostrichia*...392
squamosa, *Peltopsyche*...215
srisungwan, *Hydroptila*...108
Stactobia [Stactobiinae]...4, 6, 11, 212, 335, 362, 365, 366, 371, 383, 384, 386, 387
Stactobiella [Stactobiinae]...4, 6, 11, 336, 338, 344, 348, 350, 383, 386, 387
Stactobiinae [Hydroptilidae]...3, 4, 6, 10, 11, 12, 21, 124, 178, 186, 187, 194, 196, 199, 335, 336, 338, 352, 355, 383, 389
starki, *Neotrichia*...243
starmuehlneri, *Hydroptila*...108
staufferi, *Neotrichia*...243
stellifera, *Hydroptila*...108
Stenoxyethira [Hydroptilinae]...129, 134, 151, 156, 161
stipa, *Orthotrichia*...328
stolzei, *Catoxyethira*...343
storai, *Stactobia*...380
straeleni, *Orthotrichia*...328
strepha, *Hydroptila*...108
stylata, *Ochrotrichia*...290
styx, *Orthotrichia*...328
suanhom, *Hydroptila*...108
submontana, *Orthotrichia*...328
subrhomba, *Orthotrichia*...329
subtilis †, *Electrotrichia* †...389
subulata, *Orphninostrichia*...392
succinica †, *Allotrichia*...33
suchiara, *Orthotrichia*...329
sucrensis, *Bredinia*...337
sucusaria, *Neotrichia*...243
sudip, *Hydroptila*...109
sujangsanica, *Stactobia*...380
sukamade, *Chrysotrichia*...349
sulawesica, *Niuginitrichia*...354
sumanmalie, *Hydroptila*...109
Sumatranotrichia [Hydroptilinae]...41, 115
superba †, *Allotrichia* 33
supsup, *Pseudoxxyethira*...360
surinamensis, *Ascotrichia*...203
surinamensis, *Hydroptila*...109
susanae, *Ochrotrichia*...291
suteri, *Orthotrichia*...329
Sutheptila [Hydroptilinae]...2, 5, 22, 178
suwannee, *Tricholeiochiton*...181
sykorai, *Caledonotrichia*...109, 249
sykorai, *Hydroptila*...109, 249
sylvestris, *Hydroptila*...109
Synagotrichia [Hydroptilinae]...179, 180
syrinx, *Chrysotrichia*...349
T
tabala, *Orthotrichia*...329
tabasquensis, *Byrsoteryx*...195
tabonensis, *Chrysotrichia*...349
tacheti, *Hydroptila*...54, 109
taengdoa, *Catoxyethira*...343
tagala, *Ochrotrichia*...291
tagola, *Orinocotrichia*...362
tagus, *Hydroptila*...109
taiensis, *Catoxyethira*...343
taiwanensis, *Ugandatrichia*...184
tajam, *Chrysotrichia*...349
taji, *Microptila*...127
takamaka, *Hydroptila*...109
takitimu, *Paroxyethira*...177
takuk, *Stactobia*...381
talakalahena, *Catoxyethira*...338, 343
talea, *Orthotrichia*...329
taleban, *Orthotrichia*...329
talhada, *Metrichia*...265
talladega, *Hydroptila*...109
talhybios, *Chrysotrichia*...349
talumalaus, *Orthotrichia*...329
tamandua, *Oxyethira*...169
tamaulipasa, *Flintiella*...352
tamaza, *Mejicanotrichia*...198
tamperensis, *Oxyethira*...169
tanduk, *Chrysotrichia*...348

- tanduka*, *Hydroptila*...110
Tangatrichia [Hydroptilinae]...2, 5, 22, 24, 34, 178
tannerorum, *Hydroptila*...110
tanylobosa, *Rhyacopsyche*...298
Tanytrichia [*Oxyethira*]...5, 129, 135, 138, 139, 143, 150, 154, 155, 158, 160, 161, 166, 168, 170, 172
tanzaniensis, *Ugandatrichia*...184
tapada, *Costatrichia*...208
tapanti, *Byrsoteryx*...195
tapantia, *Leucotrichia*...213
Taraxitrichia [Neotrichiinae]...3, 6, 246
Targatrichia [Orthotrichiinae]...304, 334
tarquinius, *Plethus*...364
tarsalis, *Ochrotrichia*...291
tartaros, *Plethus*...364
Tascobia [Stactobiinae]...383, 384, 386
tasmanica, *Hydroptila*...110
tasmaniensis, *Oxyethira*...169
tatiana, *Neotrichia*...243
tatius, *Pseudoxxyethira*...360
taunay, *Ochrotrichia*...292
tauri, *Allotrichia*...33
taurica, *Hydroptila*...110
tauricornis, *Neotrichia*...243
taymyrensis, *Agraylea*...31
tega antillularum, *Oxyethira*...170
tega tega, *Oxyethira*...170
teika, *Paroxyethira*...177
teiresias, *Plethus*...364
teixeirai, *Oxyethira*...170
telamon, *Stactobia*...381
telchinos, *Stactobia*...381
teldi, *Stactobia*...381
telegonos, *Pseudoxxyethira*...360
telemachos, *Stactobia*...381
telephos, *Stactobia*...381
tellus, *Pseudoxxyethira*...360
temascalapensis, *Metrichia*...265
temenos, *Pseudoxxyethira*...361
tenanga, *Ochrotrichia*...292
tenei, *Oxyethira*...170
tenes, *Stactobia*...381
tenuata, *Ochrotrichia*...292
tenuella, *Oxyethira*...170
tenuivirga, *Alisotrichia*...192
terbela, *Hydroptila*...110
tere, *Metrichia*...265
terminus, *Stactobia*...381
termitiformis, *Leucotrichia*...213
terpisaduri, *Chrysotrichia*...349
terpsichore, *Orthotrichia*...329
tertia, *Neotrichia*...243
tetensii, *Orthotrichia*...306, 312
tethys, *Hydroptila*...110
tetraespinosa, *Alisotrichia*...192
teutonia, *Neotrichia*...243
thacila, *Stactobia*...381
thalia, *Alisotrichia*...193
thaleia, *Orthotrichia*...329
thanatos, *Orthotrichia*...329
thaphena, *Hydroptila*...111
thariel, *Orthotrichia*...329
tharsis, *Hydroptila*...111
thauomas, *Orthotrichia*...330
theano, *Hydroptila*...111
theia, *Orthotrichia*...330
theiodamas, *Hydroptila*...111
thersandros, *Hydroptila*...111
thersites, *Orthotrichia*...330
thiba, *Hydroptila*...111
thingana, *Pseudoxxyethira*...357, 359, 361
thira, *Chrysotrichia*...349
thirysae, *Metrichia*...265
thisa, *Hydroptila*...111
thisbe, *Hydroptila*...111
thisletoni, *Orthotrichia*...330
thomsonae, *Metrichia*...265
thorin, *Stactobia*...381
thrain, *Stactobia*...381
throbir, *Stactobia*...382
throlis, *Stactobia*...382
thror, *Stactobia*...382
thuna, *Hydroptila*...111
thunama, *Pseudoxxyethira*...361
thurmani, *Metrichia*...265
thyone, *Orthotrichia*...330
tiani, *Hydroptila*...102
tica, *Byrsoteryx*...195
tica, *Oxyethira*...170
tifica, *Hydroptila*...112
tigacabanga, *Chrysotrichia*...349
tigurina, *Hydroptila*...41, 112
tillyardi, *Paroxyethira*...177
timouchela, *Alisotrichia*...193
tineoides, *Hydroptila*...40, 41, 113
tinggi, *Orthotrichia*...330
tiwaka, *Oxyethira*...171
tiunovae, *Oxyethira*...171
tiza, *Alisotrichia*...193
Tizatetrichia [Stactobiinae]...4, 6, 336, 387
tjeder, *Stactobia*...382
toana, *Plethus*...364
tobago, *Hydroptila*...114
tobfona, *Orthotrichia*...330
toira, *Pseudoxxyethira*...361
tomah, *Hydroptila*...114
tombak, *Orthotrichia*...330
tombolhitam, *Hydroptila*...114
tomentosa, *Orthotrichia*...330
tompa, *Oxyethira*...151, 244
tompa, *Neotrichia*...151, 244
tong, *Hydroptila*...114
tonjolana, *Orthotrichia*...330
tonsai, *Orthotrichia*...330
tonyae, *Catoxyethira*...343
tonyi, *Stactobia*...382
topora, *Leucotrichia*...214
torquata, *Oxyethira*...171
torresiana, *Oxyethira*...171
tortosa, *Hydroptila*...115
torulosa, *Rhyacopsyche*...299
tortuosa, *Orthotrichia*...330
torza, *Oxyethira*...171
totuma, *Rhyacopsyche*...299
touba, *Oxyethira*...171
touroumaya, *Hydroptila*...115
tragetti, *Orthotrichia*...331
transversa, *Hydroptila*...81
transylvanica, *Ochrotrichia*...292
trapoiza, *Ochrotrichia*...292
traunica, *Hydroptila*...115
trebeki, *Metrichia*...265
triacantha, *Orthotrichia*...332
triaena, *Flintiella*...352
triangula, *Hydroptila*...111
triangula, *Metrichia*...265
triangularis, *Hydroptila*...112
triangulata, *Oxyethira*...171
Trichoglène [*Oxyethira*]...5, 129, 130, 131, 132, 134, 136, 139, 141, 150, 151, 153, 156, 160, 161, 163, 169, 171, 174
Tricholeiochiton [Hydroptilinae]...2, 5, 22, 30, 179

tridens, *Tricholeiochiton*...181
tridentata, *Hydroptila*...115
tridentata, *Mejicanotrichia*...198
trifida, *Chrysotrichia*...349
trifida, *Mejicanotrichia*...198
trifurcata, *Anchitrichia*...202
trifurcata, *Pseudoxyethira*...361
trigonella, *Metrichia*...265
trilineata, *Orthotrichia*...332
triloba, *Hydroptila*...115
trilobata, *Hydroptila*...115
trinitatis, *Cerasmatrichia*...196,
 197
trinitatis, *Ochrotrichia*...292
tripartita, *Costatrichia*...208
triquetra, *Metrichia*...265
trisignata, *Metrichia*...266
trispinata, *Orthotrichia*...332
trispinosa, *Metrichia*...266
tristella, *Oxyethira*...171
trisula, *Chrysotrichia*...350
triton, *Orthotrichia*...332
tritoven, *Leucotrichia*...214
tronoca, *Orthotrichia*...332
tropis, *Oxyethira*...172
tros, *Hellyethira*...40
trullata, *Hydroptila*...41, 77,
 115
truncata, *Metrichia*...266
trungcha, *Stactobia*...382
tshistjakovi, *Stactobiella*...387
tsuruga, *Oxyethira*...172
tubifex, *Leucotrichia*...214
tubulifera, *Neotrichia*...244
tulipa, *Hydroptila*...115
tullius, *Plethus*...364
tumoris, *Orthotrichia*...332
tumpul, *Hydroptila*...115
tungsalaeng, *Hydroptila*...115
tunjakkana, *Orthotrichia*...332
tuor, *Stactobia*...382
tupi, *Nothotrichia*...267
Tupiniquintrichia
 [Leucotrichiinae]...3, 6, 216
turanica, *Stactobia*...382
turbidus, *Ptilocolepus*...12, 394,
 396
turrialbe, *Rhyacopsyche*...299
turrita, *Orthotrichia*...332
tuscaloosa, *Ochrotrichia*...224,
 292
tusculum, *Hydroptila*...115

tuskera, *Acostatrichia*...201
tuskes, *Pseudoxyethira*...359
tuveva, *Oxyethira*...172
tuxtla, *Neotrichia*...244
tyche, *Orthotrichia*...332
tydeus, *Chrysotrichia*...350
tyleri, *Orthotrichia*...332
tyndareos, *Microptila*...127
typhoeus, *Orthotrichia*...333
tyro, *Orthotrichia*...333
U
ubajara, *Metrichia*...266
ubatuba, *Alisotrichia*...193
udawarama, *Orthotrichia*...333
udawasadenna, *Plethus*...364
Ugandatrichia
 [Hydroptilinae]...2, 5, 22,
 25, 35, 181, 184
ujasa, *Acostatrichia*...201
ukalegon, *Plethus*...364
ukarumpa, *Niuginitrichia*...354
ulixes, *Plethus*...364
ulmeri, *Oxyethira*...130, 172
ulmeri, *Stactobiella*...344, 383, 387
ulmeriana, *Stactobia*...382
ultima, *Alisotrichia*...193
umboina, *Niuginitrichia*...355
umbra †, *Orthotrichia*...333
una, *Oxyethira*...172
unamas, *Neotrichia*...244
uncinata, *Hydroptila*...41, 116
unica, *Ochrotrichia*...292
unicornia, *Ochrotrichia*...292
unicuspis, *Hydroptila*...116
unidentata, *Oxyethira*...172
unio, *Ochrotrichia*...293
unispina, *Neotrichia*...244
unispina, *Oxyethira*...173
upulmalie, *Hydroptila*...116
urania, *Orthotrichia*...333
urania, *Stactobia*...382
uranos, *Plethus*...364
urauchi, *Stactobia*...382
urimica, *Orthotrichia*...333
uruguayensis, *Betrichia*...204
usambarensis, *Hydroptila*...116
V
vadalis, *Orthotrichia*...333

vagot, *Chrysotrichia*...350
vagot, *Missitrichia*...128
vagva, *Niuginitrichia*...355
vaillanti, *Stactobia*...365, 382
vaina, *Oxyethira*...173
vajrabodhi, *Plethus*...365
vakrata, *Orthotrichia*...333
vala, *Hydroptila*...116
valesiaca, *Hydroptila*...116
valhalla, *Hydroptila*...117
vallecula, *Hellyethira*...36, 40
vanandeli, *Catoxyethira*...343
vanuatensis, *Hydroptila*...117
varla, *Hydroptila*...117
varratlana, *Betrichia*...204
vaskos, *Chrysotrichia*...350
vavai, *Neotrichia*...244
vaza, *Oxyethira*...173
vazquezae, *Hydroptila*...117
vectis, *Hydroptila*...41, 117, 119
vedonga, *Catoxyethira*...343
vegosa, *Peltopsyche*...215
veikaba, *Orthotrichia*...321
vekonul, *Pseudoxyethira*...361
vekonyka, *Neotrichia*...244
velascoi, *Ochrotrichia*...293
velata, *Orthotrichia*...333
velocipes, *Oxyethira*...129, 173
venezuelensis, *Bredinia*...338
venezuelensis, *Costatrichia*...208
venezuelensis, *Hydroptila*...119
ventricosa, *Alisotrichia*...193
venus, *Hydroptila*...119
veracruzensis, *Hydroptila*...119
verbekei, *Orthotrichia*...333
verda, *Ochrotrichia*...293
verginia, *Hydroptila*...119
verna, *Oxyethira*...173
vernoni, *Hellyethira*...40
verticordia, *Hydroptila*...119
vertreesi, *Ochrotrichia*...293
vertumnus, *Orthotrichia*...333
veruta, *Hellyethira*...40, 343, 344
veruta veruta, *Catoxyethira*...343
veruta septentrionalis,
Catoxyethira...344
veva, *Peltopsyche*...215
vexilla, *Caledonotrichia*...249
vibrans, *Neotrichia*...244
vichtaspa, *Hydroptila*...55, 77,
 120
victoria, *Hydroptila*...120

vieja, *Ochrotrichia*...221, 293
Vietrichia [Hydroptilinae]...2, 5,
 22, 184
vilaverde, *Hydroptila*...120
villa, *Neotrichia*...245
villarenia, *Ochrotrichia*...293
villosus, *Ptilocolepus*...396
vilnensis orientalis,
Allotrichia...33
vilnensis vilnensis, *Allotrichia*...33
viminalis, *Oxyethira*...159
violacea, *Ugandatrichia*...181,
 184
vipera, *Oxyethira*...174
virgata, *Hydroptila*...120
viridis, *Leucotrichia*...214
vissa, *Neotrichia*...245
vitcona, *Hydroptila*...120
vittata, *Hydroptila*...121
viuda, *Alisotrichia*...193
volada, *Metrichia*...261
volcanus, *Chrysotrichia*...350
volgensis, *Hydroptila*...61
volsella, *Oxyethira*...174
voltensis, *Jabitrachia*...124
vonza, *Neotrichia*...245
voticia, *Hydroptila*...121
vulgaris, *Metrichia*...266

W

waipoua, *Oxyethira*...174
wakulla, *Hydroptila*...121
walteri, *Oxyethira*...174
warabai, *Pseudoxyethira*...361
warema, *Metrichia*...266
waridora, *Orthotrichia*...334
warisa, *Hydroptila*...121
warmona, *Orthotrichia*...334
warramunga, *Oxyethira*...174
waskesia, *Hydroptila*...121
watuwila, *Chrysotrichia*...350

waubesia, *Hydroptila*...41,
 121
weddleae, *Ochrotrichia*...293
wellsae, *Jabitrachia*...124
wellsae, *Orthotrichia*...334
weoka, *Ochrotrichia*...293
wetumpka, *Hydroptila*...122
willcairnsi, *Pseudoxyethira*...361
wimmeri, *Stactobia*...383
wirthi, *Cerasmatrichia*...197
wliensis, *Dhatrichia*...35, 36
Wlitrachia [Hydroptilinae]...2, 5,
 22, 185
wojcickyi, *Ochrotrichia*...294
woldai, *Alisotrichia*...193
woodruffi, *Alisotrichia*...193
wouafondayoae,
Catoxyethira...344
wuchangensis, *Hydroptila*...122
wyomia, *Hydroptila*...122

X

xedapa, *Microptila*...126
xena, *Ochrotrichia*...294
xera, *Hydroptila*...122
xereuini, *Neotrichia*...245
xicana, *Neotrichia*...245
xoncla, *Hydroptila*...122
xuthos, *Maeyaptila*...124

Xuthotrichia

[Hydroptilinae]...2, 5, 22,
 37, 40, 175, 185

Y

yabbaca, *Orthotrichia*...334
yagua, *Neotrichia*...245
yaeyamensis, *Hydroptila*...123
yalla, *Metrichia*...266
yameogoi, *Ugandatrichia*...184
yanamona, *Flintiella*...352

yanomonoa, *Neotrichia*...246
yanayacuana, *Ochrotrichia*...294
yaoundeensis, *Catoxyethira*... see
disymetrica yaoundeensis,
Catoxyethira...339
yaowachon, *Orthotrichia*...334
yatay, *Ragatrichia*...295
yavapai, *Ochrotrichia*...294
yavesia, *Metrichia*...266
yavesia, *Neotrichia*...246
yavesia, *Ochrotrichia*...294
yayas, *Neotrichia*...246
yenicensis, *Stactobia*...383
yepachica, *Ochrotrichia*...294
yetla, *Ochrotrichia*...294
yona, *Stactobia*...383
yungarum, *Leucotrichia*...214

Z

zagalloi, *Neotrichia*...246
zairiensis, *Hydroptila*...123
zarva, *Stactobia*...383
zerbinae, *Hydroptila*...123
zeronia, *Oxyethira*...130, 174
zeus, *Hydroptila*...123
ziddensis, *Hydroptila*...123
zihuaquia, *Ochrotrichia*...294
zilaba, *Oxyethira*...175
zilbra, *Betrachia*...203, 204
zioni, *Ochrotrichia*...294
zitoi, *Neotrichia*...246
zoae, *Paroxyethira*...177
zonata, *Orthotrichia*...304, 334
zopilote, *Leucotrichia*...214
zoroastres, *Chrysotrichia*...350
zulia, *Bredinia*...338

Zumatrichia

[Leucotrichiinae]...3, 6, 201,
 205, 215, 216, 220